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A

COMPARATIVE GRAMMAR

OF THE

MODERN ARYAN LANGUAGES

OF INDIA.

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A

COMPARATIVE GRAMMAR

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OF THE

MODERN ARYAN LANGUAGES

OF INDIA:

TO WIT,

HINDI, PANJABI, SINDHI, GUJARATI, MARATHI,
ORIYA, AND BANGALI.

23464

BY

JOHN BEAMES,

D 2360

BENGAL CIVIL SERVICE,

FELLOW OF THE UNIVERSITY OF CALCUTTA,

MEMBER OF THE ROYAL ASIATIC SOCIETY, THE GERMAN ORIENTAL SOCIETY,
ETC., ETC.

VOL. I.,

ON SOUNDS.

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TO

FREDERICK EDEN ELLIOT,

BENGAL CIVIL SERVICE,

IN MEMORY OF OLD HAILEYBURY DAYS,

THESE FIRST-FRUITS OF THE STUDIES THERE BEGUN

ARE DEDICATED

BY HIS AFFECTIONATE FRIEND,

THE AUTHOR.

PREFACE.

It is with much hesitation, and with a deep sense of its many imperfections, that I now lay this volume before the public. Begun in 1866, it has for more than five years occupied my leisure hours; and if it should be remarked, as in justice it might, that the result is somewhat meagre for so long a period of preparation, I would reply that the duties of a magistrate and collector in Bengal are not only onerous, but so multifarious, and often so urgent, that he is never safe from interruption at any hour of the day or night. On an average, two hours a day has been the utmost time that I could devote to my amusements or private pursuits of any kind. Constant journeys, repeated attacks of sickness, and the "mollis inertia" inseparable from the climate during at least six months of the year, must also be taken into consideration. It may be asked, why under these circumstances I undertook the task at all? To this I answer, that to a hardworked brain change of labour is often a greater relaxation than absolute idleness, and that having always been a student of languages from my childhood, I had adopted this form of amusement in preference to any other, and had collected and grouped together many examples of the most salient peculiarities in the languages which I heard spoken round me long before any idea of writing a book entered my head.

It was, I think, in 1865 that I first saw Dr. Caldwell's

Grammar of the Dravidian Languages, and it immediately occurred to me that a similar book was much wanted for the Aryan group. It was evident that no scholar in Europe could do the work, because the written productions in the modern vernaculars and the few dictionaries and grammars procurable are not only frequently quite wrong and utterly misleading, but are also very defective, so that no one could merely from books get a firm and certain grasp of all these languages. It is necessary to be able to speak all or most of them, and to live among the people and hear them talking daily. When, therefore, I turned to scholars in India, it did not appear that any of them contemplated undertaking such a task. Then I thought that it would be well for me to try; if I could not make a perfect book, I could at any rate gather together and set forth in order the main rules, and could give copious examples and illustrations, so that, while waiting for some Bopp or Grimm to arise, students might have a handbook of some sort to guide them, and might no longer be misled by the astoundingly false etymologies which occur in the ordinary grammars and dictionaries. I have, therefore, not called this book by any mock-modest title, such as "an introduction," or "contributions to," or "notes on," or anything of the kind, because I have done my best to cover the whole ground of the subject; and whether I have done well or ill, the book was meant to be a Comparative Grammar, and I have called it so accordingly.

A residence of upwards of twelve years in India, during which I have held official posts in the Panjab, Bihar, Bengal, and Orissa, and have made long visits to

various parts of Hindustan Proper (the North-western Provinces), has rendered me familiar with Panjabi, Hindi, Bengali, and Oriya, all of which, at different times, I have had to speak, read, and write. The western languages, Marathi, Sindhi, and Gujarati, I only know from books and from such information as I have obtained from kind correspondents in Bombay, among whom my thanks are specially due to Mr. Flynn, translator to the High Court, whose notes have been of great value to me, and whose knowledge of the languages of his Presidency is both accurate and profound.

A great difficulty has been the want of good books of reference. Living in this remote wilderness, I have had only such books as my own scanty library contains; my best book has been the peasant in the fields, from whose lips I have often learnt more than I could find in dictionaries or grammars.

Such as it is, then, volume the first is now about to make its voyage home to be printed,

"Parve, nec invideo, sine me liber ibis in urbem."

I dismiss it with the hope that it may prove useful to those for whom it is intended.

My learned friend, Dr. R. Rost, Librarian of the India Office, has kindly undertaken to give this volume the benefit of his superintendence while passing through the press, thus conferring an inestimable favour, not only on the author, but on the public, by preventing the book from being disfigured by errors of printing; for all other errors I must remain responsible.

This volume contains only the Phonetics of the group. A second volume, on the noun and pronoun, is already on

the stocks, but I cannot say when it will be ready for the press. I hope, if life and health are spared, to complete the work by a third volume, containing the verb and particles; but our official work seems to get heavier, and leisure to be more unattainable, day by day. My progress is therefore of necessity slow and uncertain, and many years must elapse before my task is finished.

JOHN BEAMES.

BALASORE, ORISSA, *September*, 1871.

NOTE.

A LIST of the works which I have consulted is here inserted. Although, as I have said before, I have had comparatively little help from books, yet it is due to those living authors from whom I have derived any assistance to acknowledge the same.

Bopp: *Comparative Grammar*.

I used the French edition by Bréal. Paris, 1866.

Grimm: *Deutsche Grammatik*.

Grimm: *Geschichte der Deutschen Sprache*.

Trumpp: *Das Sindhi im Vergleich zum Prākṛit*. Journal of German Oriental Society, vol. xv., p. 690.

Trumpp: *Die Stammbildung des Sindhi*. *Ibid*, vol. xvi., p. 177.

Two most valuable essays. I have taken some examples from them, but most of those which are identical with Dr. Trumpp's I had already collected for myself before I became acquainted with his works.

Weber: *Ueber ein Fragment der Bhāgavat*. Transactions of Royal Academy of Sciences, Berlin, vol. i., 1865; vol. ii., 1866.

Weber: *Saptaśatakam*. Leipzig, 1870.

My thanks are due to the learned author for the immense benefit I have derived from the study of these two important treatises.

Cowell: *The Prākṛita Prakāśa of Vararuchi*.

This admirable edition of the leading work on Prakrit has been the basis of the present volume.

Bopp's *Glossarium Comparativum*, Westergaard's *Radices Sanskriticæ*, Benfey's *Sanskrit Dictionary* (I could not get Böttlingk and Roth's), Monier Williams's *English and Sanskrit Dictionary*, Muir's *Sanskrit Texts*, vol. ii., and numerous articles scattered through the pages of the Journals of the various Asiatic Societies, have also been constantly referred to.

It is unnecessary to specify the dictionaries and grammars of the modern vernaculars. They are those in ordinary use, and for the most part very bad and defective, except Molesworth's splendid work and Shamacharan Sirkar's very complete and useful Bengali grammar.

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COMPARATIVE GRAMMAR

OF THE

MODERN ARYAN LANGUAGES OF INDIA.

CHAPTER I.

INTRODUCTION.

CONTENTS.—§ 1. SANSKRIT THE PARENT OF THE SEVEN LANGUAGES.—§ 2. FIRST EXCEPTION, ELEMENTS ARYAN, BUT NOT SANSKRITIC—THE PRAKRITS.—§ 3. SECOND EXCEPTION, ELEMENTS NEITHER SANSKRITIC NOR ARYAN.—§ 4. ELEMENTARY DIVISION OF THE SEVEN LANGUAGES. TATSAMA, TADBHAVA, DESAJA.—§ 5. EARLY AND LATE TADBHAVAS.—§ 6. THE ACCENT.—§ 7. ABSENCE OF DATA DURING NINE CENTURIES.—§ 8. PROPORTION OF WORDS OF THE THREE CLASSES IN EACH LANGUAGE.—§ 9. DIGRESSION ON THE HINDI.—§ 10. PROPORTION OF WORDS RESUMED.—§ 11. QUANTITY OF ARABIC AND PERSIAN WORDS IN EACH LANGUAGE.—§§ 12-14. INFLECTIONAL SYSTEMS OF THE SEVEN LANGUAGES,—QUESTION OF NON-ARYAN INFLUENCE.—§ 15. STAGES OF DEVELOPMENT IN THE PRESENT DAY.—§ 16. THE CHARACTER.—§ 17. PANJABI.—§ 18. BENGALI.—§ 19. ORIYA.—§ 20. PRONUNCIATION, अ.—§ 21. THE OTHER VOWELS.—§ 22. CONSONANTS.—§ 23. SEMI-VOWELS.—§ 24. SIBILANTS.—§ 25. NASALS.—§ 26. COMPOUND CONSONANTS—PECULIARITIES OF BENGALI.—§ 27. PECULIARITIES OF SINDHI.—§ 28. LITERATURE.—§ 29. DIALECTS.—§ 30. GENERAL REMARKS ON CHRONOLOGICAL SEQUENCE OF THE VARIOUS LANGUAGES, AND THEIR PROBABLE FUTURE FATE.—TABLE OF INDIAN ALPHABETS.

§ 1. ON analyzing the vocabulary of the seven languages which form the subject of this work, we observe at the outset that a large number of words are common to them all. In all, with slight modifications, *ho* means be; *kar*, do; *â*, come; *jâ*, go; *khâ*, eat; *pî*, drink; *mar*, die; *mâr*, strike; *sun*, hear; *dekh*, see; and among nouns a still greater number is found

with but minor differences in each member of the group. Inasmuch as it is also clear that all of these numerous words are found in Sanskrit, we are justified in accepting so far the native opinion that Sanskrit is the parent of the whole family. By the term Sanskrit is meant that language in which the whole of the religious, legendary, and philosophical literature of the Aryan Indians is written, from the ancient hymns of the Vedas down to the latest treatises on ceremonies or metaphysics. That this language was once the living mother-tongue of the Aryan tribes may safely be conceded; that it was ever spoken in the form in which it has been handed down by Brahmanical authors may as safely be denied. If then the word Sanskrit be, as in strictness it should be, applied only to the written language, the statement that Sanskrit is the parent of the modern vernaculars must be greatly modified, and we should have to substitute the term Middle-Aryan to indicate the spoken language of the contemporaries of Vālmīki and Vyāsa, the reputed authors of the two great Indian epics, Rāmāyana and Mahābhārata. To do this would, however, be to draw too fine a distinction, and might lead to confusion. We shall, therefore, use the word Sanskrit; but in order to make perfectly clear the sense in which it is used, and the exact relation which Sanskrit, both written and spoken, bears to the other languages, whether contemporaneous or subsequent to it, some further explanation is necessary.

Let it then be granted as a fact sufficiently proved in the following pages that the spoken Sanskrit is the fountain from which the languages of Aryan India originally sprung; the principal portion of their vocabulary and the whole of their inflectional system being derived from this source. Whatever may be the opinions held as to the subsequent influences which they underwent, no doubt can fairly be cast on this fundamental proposition. Sanskrit is to the Hindi and its brethren, what Latin is to Italian and Spanish.

The next point, however, is that, even to a casual observer, it is clear that the seven languages as they stand at present contain materials not derived from Sanskrit, just as Italian and French, without ceasing to be modern dialects of Latin, contain many words of Teutonic origin. These materials may be classed under two heads. First, those which are Aryan, though not Sanskritic. Secondly, those which are neither Sanskritic nor Aryan, but something else. What this something else is, remains to be seen; it is, in fact, the great puzzle of the whole inquiry: it is the mathematician's x , an unknown quantity.

§ 2. First, then, we have to explain what is meant by the term, "Aryan, though not Sanskritic." It may be accepted as a well-established fact, that the Aryan race entered India not all at once, nor in one body, but in successive waves of immigration. The tribes of which the nation was composed must therefore have spoken many dialects of the common speech. I say "must," because it is contrary to all experience, and to all the discoveries hitherto made in the science of language, to suppose otherwise. All the races of the great Indo-European family, whether they migrated into India, Persia, or Europe, have been found, however far back they can be traced, to have spoken numerous dialects of a common language; but this common language itself only existed as one homogeneous speech, spoken without any differences of pronunciation or accent by the whole race, at a time far anterior to the earliest date to which they can be followed. Indeed, so much is this the case, that writers of high repute have not hesitated to declare that no such homogeneous speech ever existed at all; that, in fact, there never was one original Iranian, or one original Celtic or German language. I am inclined to give in my adhesion to this view, holding that the idea of one common language is the creation of modern times, and the effect of the spread

of literature.¹ But leaving this on one side, the most probable hypothesis is, that the Aryans from the earliest times spoke many dialects, all closely akin, all having the same family likeness and tendencies common to all, perhaps in every case mutually intelligible, but still distinct and co-existent. One only of these dialects, however, became at an early period the vehicle of religious sentiment, and the hymns called the Vedas were transmitted orally for centuries, in all probability with the strictest accuracy. After a time the Brahmans consciously and intentionally set themselves to the task of constructing a sacred language, by preserving and reducing to rule the grammatical elements of this Vedic tongue. We cannot tell whether in carrying out this task they availed themselves of the stores of one dialect alone: probably they did not; but with that rare power of analysis for which they have ever been distinguished, they seized on the salient features of Aryan speech as contained in all the dialects, and moulded them into one harmonious whole; thus, for the first time in their history, giving to the Aryan tribes one common language, designed to be used as the instrument for expressing thoughts of such a nature as should be deemed worthy of preservation to all time.²

¹ It is strenuously denied by many that Sanskrit ever had any dialects, but it seems to me that their arguments refer only to the written language. In Vedic, or even pre-Vedic, times it is probable that dialects existed, though of course there is nothing that can be called proof of this supposition.

² I have explained my views more concisely in another place as follows: "It is a highly probable theory that the old Aryan, like all other languages, began to be modified in the mouths of the people as early as the Vedic period, and that the Brahmans at a subsequent date, in order to prevent the further degeneration of their language, polished, elaborated, and stiffened it into the classical Sanskrit. We cannot, however, suppose that they brought any new material into the language, but simply that they reduced to rule what was till then vague and irregular, that they extended to the whole of the language euphonic laws which had previously been only of partial application, and so forth; all the while, however, only working on already existing materials."—From a paper on the Treatment of the Nexus, Journ. Royal Asiatic Society, vol. v., p. 151.

All this was anterior to the introduction of the art of writing; but when that art was introduced, it was largely used by the Brahmans for the reproduction of works in the sacred Sanskrit, that is, the purified quintessence and fullest development of the principles of Aryan speech.

But though Sanskrit had, by the labours of Pânini and others, become an historical fact, so that now at length there existed a standard, and purists might condemn, as in fact they did, all departures from it as vulgar errors and corruptions, it is beyond a doubt that the local dialects continued to live on. Sanskrit was not intended for the people; it was not to be endured that the holy language, offspring of the gods, should be defiled by issuing from plebeian lips; it kept its place apart, as the appropriate speech of pure Brahmans and mighty kings. But the local dialects held their own; they were anterior to Sanskrit, contemporary with it, and they finally survived it. Nevertheless, Sanskrit is older than the dialects. This sounds like a paradox, but it is true in two senses: first, that as the ages rolled on the vulgar dialects developed into new forms ("corrupted" is the common way of putting it), whereas Sanskrit remained fixed and fossilized for ever, so that now, if we wish to find the earliest extant form of any Aryan word, we must, in the great majority of instances, look for it not in the writings in the popular dialects which have come down to us, but in Sanskrit; and secondly, that although Pânini lived in an age when the early Aryan dialects had already undergone much change from their primitive condition, yet among the Brahmans for whom alone he laboured there existed a traditional memory of the ancient, and then obsolete, form of many words. They would remember these archaic forms, because their religious and professional duties required them constantly to recite formulæ of great antiquity, and of such sacredness that every letter in them was supposed to be a divinity in itself, and which had consequently been handed down from primeval

times absolutely unchanged. In teaching his pupils the true principles of speech, Pânini would naturally use these archaic words in preference to the corruptions current around him, and thus the language which he to a certain extent created was in great part a resuscitation of antiquated terms, and thus literally older than the popular dialects which in point of time preceded its creation.¹

Still there are words, and those not a few, which can be traced back to the Prakrits, as these popular forms of speech are called, though no signs of them exist in Sanskrit, and this is especially the case where two words of like meaning were current in the mouths of the people; one of which, from the accident of its being a popular form of some word in use in the Vedas, or from some other cause, was selected for refined and scholarly use, while the other was branded as vulgar, rejected, and left for the service of the masses. This class of words it is which I have classed as Aryan, though not Sanskritic.

To complete this branch of the subject, it is next necessary to describe briefly the position and relations of the Prakrits.

The Prakrit dialects are theoretically supposed to be those forms of the speech of the Aryans which were commonly used by the masses. In the earliest records we have, they are grouped under five heads representing the local peculiarities of five provinces. First is the "lingua præcipua," or Mahârâshtrî, spoken in the country round the ancient city of Ujjayini, or Avanti, in Malwa. How far this language ex-

¹ Many words occur in the Vedas in a Prakrit rather than a Sanskrit form. I quote at second-hand a remark of Weber's which summarizes the whole matter neatly: "The principal laws of Prakrit speech, viz., assimilation, hiatus, and a fondness for cerebrals and aspirates, are prominent in the Vedas, of which the following are examples; kuṭa=kṛta; kâṭa=karta; geha=griha; guggulu=gungulu; vivitṭyai=vivishṭyai; kṛikalâsa=kṛikadâśu; purodâśa=purolâśa (comp. das'ru=lacryma); paḍbhiḥ=padbhiḥ; kshullaka=kshudraka; etc."—Muir's *Sanskrit Texts*, vol. ii., p. 139. (1st Edition.)

tended is not clear, but it may be assumed roughly to have included the south of Rajputana, and a considerable portion of the present northern Maratha country. Next the Sauraseni, spoken in Surasena, in modern times the country round Mathura. Thirdly, the Māgadhi, the vernacular of Behar. Fourthly, the Paisāchî or dialect of the Pisāchas, whose exact locality is not defined. And fifthly, the Apabhraṁśa, or "corrupt" dialect, which is perhaps to be found in Sindh and western Rajputana. That this division is artificial, and a mere grouping together of a mass of local dialects, is apparent from the fact that no two writers agree in their arrangement, and the total number of Prakrits is by some authors put as high as twenty or twenty-two. Be this as it may, it is sufficient for our present purpose to note that these dialects were numerous, and that they were in most cases designated by the name of the province where they were spoken. In the Sanskrit dramas, however, a still more artificial distinction prevails, a different dialect being attributed to each class of characters. Thus kings and Brahmans speak Sanskrit, ladies of high rank Maharashtri, servants, soldiers, buffoons, and the like use one or other of the inferior dialects. That this custom represents any state of things that ever existed is highly improbable. The ordinary business of life could not have been carried on amidst such a Babel of conflicting tongues. Perhaps the best solution of the difficulty is to suppose that the play-writers mimicked the local peculiarities of the various provinces, and as in India in the present day great men fill their palaces with servants drawn from all parts of the country, so it may have been then. A Bengali Zemindar employs men from the Panjab and Hindustan as guards and doorkeepers; his palanqueen-bearers come from Orissa, his coachmen and water-carriers from Northern Bengal, and so on. Similarly an ancient Indian king drew, we may suppose, his soldiers from one province, his porters and attendants from another, his dancers and buffoons from a third.

These all when assembled at the capital would doubtless strike out some common language by which they could communicate with each other, just as in the present day Urdu is used all over India.¹ But just as this Urdu is spoken incorrectly by those whose mother-tongue it is not, so that the Bengali corrupts it by an admixture of Bengali words and forms, and speaks it with a strong Bengali accent; so in ancient times these servants and artificers, collected from all corners of a vast empire, would speak the common *lingua franca* each with his own country twang; and the Prakrit of the plays would appear to be an exaggerated representation, or caricature, of these provincial brogues.

But there are works of a more serious character to which we can refer for a solution of the problem of the real nature of the Prakrits. In the sixth century before Christ there arose in Behar the great reformer Sakyamuni, surnamed Buddha, or "the wise," who founded a religion which for ten centuries drove Brahmanism into obscurity, and was the prevailing creed of almost all India. The religious works of the Buddhist faith, which are extremely numerous and voluminous, have been the means of preserving to us the Magadhi Prakrit of those days. Buddhism was imported into Ceylon in 307 B.C., and the Magadhi dialect under the name of Pali has become the sacred language of that island.²

¹ It is a characteristic peculiarity of India, arising from want of means of communication, that trades and professions are still confined to particular localities; one town produces swords, and nothing else; another is entirely devoted to silk-weaving, and no other town but that one presumes to rival it.

² It must however be stated that there are reasons for doubting whether the Pali of Ceylon is really the same as the Magadhi. Some authors are inclined to doubt this, and state that the Pali corresponds more closely with forms of Prakrit spoken in Western India. It matters little or nothing to the present inquiry whether this be so or not. We are only indirectly concerned with Prakrit in this work. It is sufficient to say that the Pandits of Ceylon use the words Pali and Magadhi as convertible terms. Pali in fact means only "writing."

Similarly another religious sect, the Jains, have used the Maharashtri Prakrit as the medium for expressing the tenets of their belief. There are also some poems in other Prakrit dialects.

Without going into details, which would be out of place here, it may be stated in a general way that the scenic Prakrit and that of the poems differ from Sanskrit more particularly in the omission of single consonants, and that this omission is carried to such an extent as to render one half or more of the words used unintelligible and unrecognizable; whereas in the religious works this practice, although it exists, is not allowed to run to such an extreme. As this subject will be reverted to further on, it need not be more than touched on here. It may be added that all the Prakrits are, like the Sanskrit, synthetical or inflectional languages.¹

§ 3. Next comes the class of words described as neither Sanskritic nor Aryan, but *æ*. It is known that on entering India the Aryans found that country occupied by races of a different family from their own. With these races they waged a long and chequered warfare, gradually pushing on after each fresh victory, till at the end of many centuries they obtained possession of the greater part of the territories they now enjoy. Through these long ages, periods of peace alternated with those of war, and the contact between the two races may have been as often friendly as hostile. The Aryans exercised a powerful influence upon their opponents, and we cannot doubt but that they themselves were also, but in a less degree, subject to some influence from them. There are consequently to be found even in Sanskrit some words which have a very un-Aryan look, and

¹ Lest it should be objected that this description of the Prakrits is too brief and scanty, I must remind the reader again that our business is with the modern languages only, and that the subject of Prakrit, though frequently introduced for the sake of completing the range of view, is after all quite secondary throughout.

the number of such words is much greater still in the modern languages, and there exists therefore a temptation to attribute to non-Aryan sources any words whose origin it is difficult to trace from Aryan beginnings.

It may be as well here to point out certain simple and almost obvious limitations to the application of the theory that the Aryans borrowed from their alien predecessors. Verbal resemblance is, unless supported by other arguments, the most unsafe of all grounds on which to base an induction in philology. Too many writers, in other respects meritorious, seem to proceed on Fluellen's process, "There is a river in Macedon, and there is also moreover a river in Monmouth, and there is salmons in both." A certain Tamil word contains a P, so does a certain Sanskrit word, and *ergo*, the latter is derived from the former! Now, I would urge that, in the first place, the Aryans were superior morally as well as physically to the aborigines, and probably therefore imparted to them more than they received from them. Moreover, the Aryans were in possession of a copious language before they came into India; they would therefore not be likely to borrow words of an ordinary usual description, such as names for their clothing, weapons, and utensils, or for their cattle and tools, or for the parts of their bodies, or for the various relations in which they stood to each other. The words they would be likely to borrow would be names for the new plants, animals, and natural objects which they had not seen in their former abodes, and even this necessity would be reduced by the tendency inherent in all races to invent descriptive names for new objects. Thus they called the elephant *hastin*, or the "beast with a hand," and *gaja*, or the "roarer"; the monkey *kapi*, or the "restless beast," and *vânara*, or the "forest-man"; the peacock *mayûra*, in imitation of its cry. A third limitation is afforded by geographical considerations. Which were the tribes whom the Aryans mixed with, either as friends or foes? Could the bulk of them have

come into frequent and close contact with the Dravidians, and if so, when and how? These are questions which it is almost impossible to answer in the present state of our knowledge, but they are too important to be altogether set aside, and it may be therefore pointed out merely as a contribution to the subject, that the tribes driven out of the valley of the Ganges by the Aryans were almost certainly Kols to the south, and semi-Tibetans to the north. It is fair to look with suspicion on an etymology which takes us from Sanskrit to Tamil without exhibiting a connecting series of links through the intervening Kol tribes.

If the above limitations are rigidly applied, they will narrow very much the area within which non-Aryan forms are possible in Sanskrit and its descendants, and will force us to have recourse to a far more extensive and careful research within the domain of Sanskrit itself than has hitherto been made, with a view to finding in that language the origin of modern words.

§ 4. Having thus noticed the three classes of materials which have entered into the composition of the seven languages, I now proceed to examine the question as it were from the interior, in order to attain to a certain amount of precision in estimating the relative proportions of each of these three elements. For this purpose it will be convenient to use the familiar native divisions, which go to the root of the matter as far as their lights enable them. Words in any of these seven languages are divided into three classes.

1. Tatsama तत्सम, or "the same as it" (*i.e.* Sanskrit).
2. Tadbhava तद्भव, or "of the nature of it."
3. Desāja देशज, or "country-born."

This division will be used throughout the following pages, and may be thus explained.

Tatsamas are those words which are used in the modern lan-

guages in exactly the same form as they wear in Sanskrit, such as दर्शन, राजा, कवि. The only change which these words have undergone is that in pronunciation; the final *ah*, *am*, of the Sanskrit masculine and neuter are rejected, and we hear *darshan*, *nimantran*, for *darśanam*, *nimantranam*.

Tadbhavas are those words which, though evidently derived from Sanskrit, have been considerably changed in the process, though not so much so as to obscure their origin. Such are H. आंख "eye," from Skr. अक्षि; कोइल a "cuckoo," Skr. कोकिल; गद्दा an "ass," Skr. गर्दभ.

Desajas are those words which cannot be derived from any Sanskrit word, and are therefore considered to have been borrowed from the aborigines of the country, or invented by the Aryans in post-Sanskritic times; such as पगडी a "turban," डाब an "unripe cocoa-nut," डोंगा a "canoe," and the like.

This classification supplies an additional method of arriving at a determination as to the proportion of these various elements in the seven languages. Tatsamas are all Sanskrit: even if the Sanskrit word were originally borrowed from non-Aryan sources, it has become, as far as the modern Aryans are concerned, pure and classical. Tadbhavas too are all Aryan, either Sanskritic or not; but there is so much to be said about these Tadbhavas later, that they may be passed over for the present as Aryan. We have then only Desajas left; and in considering them, it must be borne in mind that these seven languages have never been subjected to close scientific scrutiny: it is not yet known what are their laws and principles of derivation. A long string of writers, from Vararuchi downwards, have enunciated certain general rules which guide the transition of words from Sanskrit into Prakrit, but no step has been taken beyond this. Indian Pandits will not often waste their time on the vernaculars, and, if they do, are content to note such words as afford examples of any of the rules of Vararuchi or his successors, and to set down all words which cannot by the

operation of these rules be at once transformed into Sanskrit as *Deśaja*. European scholars also have got no further than Prakrit, and seem to believe that the modern dialects are merely corruptions of Prakrit forms. It is therefore not presumptuous to say that further research, and a better acquaintance with the laws of development of these languages, will probably enable us ere long very much to diminish the number of these Desajas by tracing them back through newly discovered processes either to Sanskrit or Prakrit. Even as matters stand at present, if all the Tatsamas and all the Tadbhavas be Aryan, there is only a very small proportion left which can be non-Aryan.

§ 5. Of the three classes into which all the languages have been divided in the preceding section, Tatsamas are the least interesting to the student. This class consists of pure Sanskrit words which had long been dead and buried, so to speak, when in comparatively recent times they were resuscitated and brought into use by learned men, partly to supply real wants, but still more to show off their own learning. They have not been current in the mouths of the people long enough since their new birth to have undergone any of those processes of change to which all really living words in every language are constantly subjected; and a great many of them, especially in Bengali and Oriya, are not likely ever to be used colloquially. They ought certainly to be excluded from dictionaries.

It is to the Tadbhavas that we must turn if we would become acquainted with the secrets of the phonetic machinery of the Aryan Indians. Of these there are two sorts, so distinguished from one another that it is impossible to mistake them. The one class consists of those words which were in use in Prakrit, and in which the Prakrit processes have been carried one step further. The other contains words which apparently have not come through Prakrit, as they exhibit a more perfect form, and

a nearer approach to the Sanskrit than the Prakrit form does. The problem which has to be explained is this, whence comes it that words in the modern languages preserve a greater degree of resemblance to Sanskrit or old Aryan, than the Prakrits do? How is it, for instance, that Hindi has *rât*, *râg*, *nâgarî*, *gaj*, for Sanskrit *râtri*, *râga*, *nâgarî*, *gaja*, where Prakrit has only *râi*, *râä*, *nâari*, *gaä*? If these modern languages were regularly descended, in respect of such words as these, from Sanskrit through Prakrit, the letters which had been lost in the latter could never have been restored. The masses speak by ear, and by habit. Even in India, where people perhaps think more about the languages they speak than we do in Europe, the majority of speakers, after *râi* had been in use for several generations, would not be aware that the letters *tr* had dropped out; and even if they became aware of this fact, no one would go about to restore them. How many Englishmen know that a *g* has dropped out of such words as *say*, *day*, *nail*, *sail*, *rain*,¹ and how many, if they knew it, would care to make the innovation of putting them back again? In the Spanish of Cervantes, when Don Quixote, in one of his lofty flights, used the then rapidly obsolescent forms *fermosa*, *fazañas*, *facienda*, *amabades*, and the like, for the more usual *hermosa*, *hazañas*, *hacienda*, *amabais*, he is held up to ridicule, even though some of his hearers were educated men, and must have known the Latin *formosa*, *factiones*, *facienda*, *amabatis*.

There is, it appears to me, only one way of accounting for the presence of words like *rât* and the rest in the modern languages, and that is, deliberate purpose on the part of some person or set of persons who had sufficient influence to effect what they desired. This set of persons can be no other than the Brahmans. In this instance history, usually so silent in ancient India, steps in to help us. We know that the Buddhists

¹ Anglo-Saxon, or Old English, has *sægan*, *dæg*, *nægel*, *sægel*, *rægn*. Gothic *days*, *nagls*. Modern High German *sagen*, *tag*, *nagel*, *segel*, *regen*.

were finally extirpated by the Brahmans about the ninth or tenth century of our era, just before the dawn of modern Indian literature. Brahmanism then resumed its sway, and gradually crushed out the hostile sect, though they still lingered on in some parts of India for a long time. Sârang Dev, son of Bisal Dev, King of Ajmer, in the ninth century,¹ embraced Buddhism, but was argued back into the orthodox faith by the contemptuous remonstrances of his father, who urged that this नष्ट ग्यान, *nashta gyân*, or, as we should say, “exploded theory,” was not a becoming religion for a Rajput prince.² At this time the

¹ He ascended the throne Samvat 821.

² The passage occurs in the first book of Chand, and the story is probably historical, though, as usual with Chand, mixed up with much that is extravagantly legendary. Sârang Dev's foster-brother, a bania, had been killed by a tiger while travelling through a forest, and the prince was so grieved that he turned Buddhist. The words are—

अति दुचित भयौ सारंग देव ।
 नित प्रति करै अरिहतं सेव ।
 बुध ध्रम लियौ बांधे न तेग ।
 सुनि स्रवन राज मन भौ उदेग ।
 बुझाइ कुवंर सनमान कीन ।
 किहि काज तुमं इह धम्म लीन ।
 तुम कंडि सरम हम कहौ बत ।
 बानिक्क पुत्र हन तैं दुचित ।
 इह नष्ट ग्यान सुनिये न कान ।
 पुरषातन भज्यै किन्ती हान ।
 तुम राज वसं राजनह संग ।
 मृगया सर खेलौ बन दुरंग ।
 परमोध तजौ बोधक पुराण ।
 रामायन सुनऊ भारथ निदान ॥

“Very grieved was Sârang Dev, constantly he worships the Arhant, he embraced

Saiva form of Hinduism was being singularly mixed up with the newer and more attractive Vaishnava creed, and the Brahmans were rapidly resuming their long-lost sway over the popular mind. Now Buddhism had specially selected the vernaculars of the day as the vehicle for its teaching, and the Brahmans, in resuscitating their religion, naturally brought back the sacred Sanskrit. In the passage above cited Bisal Dev exhorts his son to have the Ramayan, Mahabharat, and Purans read to him, and in the same poem the bard recites the names and number of verses of the eighteen Purans as a means of purifying the souls of his listeners. The public readings and recitations of Sanskrit works must have familiarized the minds of the masses with the ancient forms of words, and no doubt the Brahmans did their best to foster the use of these ancient forms, as they do at the present day, so that gradually a large class of words in their pure Sanskrit shape got into circulation. These words, when once more current, naturally began to undergo the influences which are always at work upon human speech, and developed by degrees into the forms in which we now have them. This process, once begun, has continued to the present day.

The words resuscitated from Sanskrit in the post-Buddhistic period do not appear to have been changed according to the same general rules as those which prevailed in times when the Prakrits were spoken. In those earlier times the elision of single consonants in the middle of a word seems to have been almost universal, and even initial letters are sometimes rejected. But in the modern words a more manly and vigorous

the religion of Budh, he binds not on his sword; bearing the news, the king's mind was distressed; he called the prince, and saluting him (said), Why have you embraced this religion, abandoning shame tell me, are you grieved at the death of the bania's son? Do not listen to this destroyed science, (by which) manliness flies away, fame is destroyed. You are of royal race, with kings hunt the deer in the far-stretching forest, abandon this delusion, be the Purans your guide, listen to the Ramayan and (Maha)bharat."—*Chand*, i., 72.

pronunciation obtained, and these elisions are not so frequent. It is unadvisable here to anticipate remarks more properly belonging to Chapter III., and I content myself therefore with noting the fact.

We have, then, a continuous succession of layers or strata of words, from those which have come down through the Prakrits, and which I call, for the sake of distinction, early Tadbhavas, to those which were revived from Sanskrit at the time of the reaction against Buddhism; and after these a constant series of words, to be called modern or late Tadbhavas, less and less removed from the pure Sanskrit form in proportion as the date of their revival is more and more recent; till at last we reach words which have only been dug up by Pandits in the present century, and have not yet had time to become changed in any way. Some of the early Tadbhavas have been exceedingly altered, so much so that all resemblance to Sanskrit has been lost, and the Pandits have therefore classed them together with non-Aryan words as Desaja.

§ 6. It may now be asked, how do we distinguish between early and late Tadbhavas in cases where the word is not found in any Prakrit writer? To answer this, an analogy must be drawn from the Romance languages of Europe, whose relation to the Latin is so strikingly parallel to that which our seven languages bear to Sanskrit. It is not intended here to carry out the comparison to its fullest extent. Deeply interesting and fascinating as the task would be, this is not the place for it, nor are sufficient materials available. But it may be stated as a general proposition, that in the whole realm of linguistic science there exists no more remarkable similarity than that between the history of the development down to its minutest particulars of the

Romance group of languages, the Provençal, Italian, French, Spanish, and Portuguese, and the indications, we cannot call it history, of the origin and growth of the Hindi, Marathi, Bengali, and Sindhi.¹

It is observable in French that there are often two forms of the same word—one ancient, the other modern. The ancient word, though often very much corrupted, invariably retains the accent on the same syllable as in the Latin. And the reason of this is plain: in the days when those words were adopted into common use by the inhabitants of Gaul, they were taken, as it were, from the lips of the Romans themselves and accentuated naturally just as the Romans accentuated them. They became current colloquially long before they were written in many instances, and could not fail to be pronounced correctly. But the modern forms of these words were resuscitated by learned men from Latin authors where they occurred, just as the Pandits do and have done with Sanskrit words. In borrowing these words the savants of later times did not know how they were pronounced, and did not care; they merely cut off the Latin termination, and pronounced the word as seemed best to themselves; as the modern and mediæval French accent differ considerably in the place of their incidence from the Latin accent, the result is that in no case does the modern

¹ I have placed these four languages alone, because, down to the fifteenth century, the Panjabi and Gujarati are little more than dialects of the Hindi; and the Oriya, till the time of Upendra Bhanj and Dīnkrishna Dās, has no literary existence, and we cannot tell what the spoken language was like, because poets always wrote a language of their own, having no care to keep their works on the level of the spoken dialects. The poems of the earliest Bengali writers also present very few of the grammatical peculiarities of modern Bengali; they, like Chand, and even like much later writers, Tulsi Dās and Bihāri Lāl, resemble the writings of the Troubadours and Trouvères, in which the old synthetical languages with their array of inflections have fallen into decadence and disuse, while the analytical system of modern time has not yet obtained its full development.

or scientific term bear the accent on the same syllable as in Latin.¹

Now in Sanskrit there is also a system of accentuation, though not yet, I believe, entirely understood, and consequently an analogous procedure to the above may be traced in the case of the Indian languages also. Acting upon this assumption, if we find a word retaining, in spite of various changes in its form in other respects, the accent on the same syllable as in Sanskrit, it will not be altogether unreasonable to conclude that it was derived from that language, at a time when it was still spoken among learned men, or, at all events, when a knowledge of its true pronunciation had not died out, and we may, therefore, ascribe to it an antiquity of no mean kind. In some cases, however, though the principle is the same, the method of expression of it is slightly varied; in other words, the Sanskrit accent is reproduced and perpetuated by lengthening the vowel on which it fell and by shortening adjacent long vowels. This is especially the case, to take a common example, in oxytone nouns, which always, if early Tadbhavas, end in *ā—l*, or *ō—l*, as the proclivity of the language may incline; an oxytone noun, when it becomes a late Tadbhava, neglects the accent, and ends with the consonant. Thus, we find from Skr. *क्षुर* “knife” (oxytone), H. *कुरा*; while from Skr. *क्षेत्र* “field”

¹ The following list of words will exemplify what is meant:

Latin.		Old Tadbhavas or popular French words.		New Tadbhavas or scientific words.
alūminum	...	alūn	...	alumine
āgelus	...	ānge	...	angelūs
blāspemum	...	blāme	...	blasphème
cāncer	...	chāncere	...	cancér
débītum	...	détte	...	debīt
exāmen	...	essāim	...	examén
mōbilis	...	meūble	...	mobile
ōrganum	...	ōrgue	...	orgāne

(oxytone), we get H. खेत, M. शेत, and a consonantal ending in all the languages. We should therefore set down the first of these words as an early, the second as a late, Tadbhava. So also when we see that Skr. क्षीर "milk" (oxytone), makes, not *khîrá*, but खीर *khîr*, in all the languages, we have grounds for holding that the word has been resuscitated in comparatively modern times; and in the case of this particular word we are supported in this idea by the fact that *khîr* is not the ordinary word for "milk." In all the languages the common word is दूध, an undoubtedly ancient Tadbhava from Skr. दुग्ध; *khîr* is rather an affectation of modern times, and in some of the languages has a secondary meaning; while *dūdh* is reserved the simple primary signification; *khîr* is used for a preparation of boiled rice and milk.

Another instance is the causal verb in Sanskrit, which has the accent on the first syllable of the characteristic, as in चोरयति *choráyati*. The Hindi in all its pure causals is followed by Bengali, Oriya, Panjabi, and Gujarati in retaining a long *á* in the same position, as *churána*, *bajāna*, *milána*, *karána*. This long *á* is not produced by rejecting the *y* of *aya*, and contracting the two vowels into one, as is proved by the fact that in old Hindi the last *a* of the two has gone out, leaving the *y* changed into *u*, as *karáunâ*, *dikháunâ*, *bujháunâ*, forms still in use in many rustic parts of India. Moreover, though the first syllable of the verb in Sanskrit takes *guṇa*, yet we find in the moderns that its lack of accent subjects it to be shortened, as in the examples above given. In Marathi the causal verb is formed by the insertion of the syllables अवि, or इव, or ववि, as *mānren*, "to kill," *māravinen*, "to cause to kill"; *khānen*, "to eat," *khāvavinen*, "to cause to eat"; *soḍnen*, "to loose," *soḍavinen*, "to cause to loose." In the first of these forms the *y* of *aya* is changed to *r*, just as in Hindi it becomes *u*, and though both the short vowels remain, yet the influence of the accent operates in retaining the accented vowel

as *a*, while the unaccented vowel is weakened to *i*. In *vari* we have the same form, but with a *v* prefixed, and the form *iva* is a mere modern corruption, which is rejected in many cases by good authors.

Although, however, I think sufficient proof is obtainable of the fact of accentual influence, I am far from being in a position to push the theory to its full length. In truth the accent is always a difficult and obscure matter, and it is the more so in the modern languages, because they have passed through a period, a very long period, of their existence without a literature.

§ 7. It is this absence of written memorials by which to trace the current popular speech which constitutes, and probably always will constitute, the main difficulty of the inquiry. The great value to philologists of the Romance group of languages consists in the fact that they originated in historical times, and the various stages of their growth and development lie before our eyes in a long series of documents. "The language of the native population, the changes which took place in their political condition, the races and languages of the invaders and of the other foreign nations with which they came in contact, are all certainly known: and although the early stages of these Latin dialects, when they were merely barbarous and unfixed jargons, formed by the intercourse of natives and strangers, spoken chiefly among illiterate persons, and used neither as the language of the Government, of legal instruments, nor of books, are not only (with the exception of a few words) wholly unknown, but lost beyond hope of recovery; yet the events which accompanied and occasioned their origin are matter of historical record; and, if we cannot always say with certainty to what precise cause the changes which the Latin underwent were owing, our information enables us at least to obtain negative results, and to exclude undoubtingly

many hypotheses which might be tenable if we had merely the languages without a contemporary history of the times when they arose."¹ It is precisely in this respect that the Indian languages are wanting. In early Indian literature we have Sanskrit and the Prakrits only, and though these latter by exhibiting certain phonetic changes help us very much in tracing the origin of modern words, yet in the inflectional department, so to speak, they afford very little real assistance, because they remain still purely synthetical. Moreover, those Prakrits which contain the greatest amount of literature lie under the same suspicion as Sanskrit, namely, that they do not represent the spoken language of their day. It seems, unhappily, to have been the fate of every Indian language, that directly men began to write in it, they ceased to be natural, and adopted a literary style which was handed down from one generation of writers to another, almost, if not entirely, unchanged. Thus not only has the Sanskrit remained fixed and unaltered through all the ages, but the Buddhists have fossilized one dialect of Prakrit, and the Jains another; so that whatever may be the date of any works either in Sanskrit or the Prakrits which have been, or may hereafter be, discovered, we cannot accept even the most recent of them as exhibiting the real contemporary condition of any vernacular. In point of development, we do not get lower down than about the first century of our era; for even if we get a Jain book written in the fifth or sixth century, we shall find it composed in the language of the first or second, just as a Sanskrit work written yesterday is composed in a form of speech which has not been current for twenty-seven centuries. The curtain falls on Indian languages, then, about the first century, and does not rise again till the tenth; and when it rises, the dawn

¹ Sir G. C. Lewis, "Essay on the Romance Languages," p. 9. This clever little work gives an admirably condensed and lucid epitome of the whole question of the Romance languages.

of modern literature and speech-formation is already breaking, and our Indian "morning-star of song," Chand Bardai, is heard chanting the gestes of Prithiraj in a dialect which, though rude and half-formed, is still as purely analytical as the common familiar talk of the Indians of to-day. How are we to throw light on this long night of nine centuries, how fill up the details of the changes that occurred in these languages during the time when

Illachrymabiles
Urgentur, ignotæque longæ
Nocte, carent quia vate sacro ?

We may get as near to the brink of this vast gap on either side as we can, but I very much doubt if the intervening space will ever be filled up; the materials seem lost for ever. Buddhism is our only chance, but if the Buddhistic literature which remains to be disinterred prove, as almost certainly it will, to be no more faithful a representative of current speech than those works which have already been made accessible to the public, there seems to be nothing more to hope for, and these nine centuries must remain for ever a sealed book.

In the absence therefore of strict historical data, we are driven to fall back upon the argument derived from analogy, and especially the analogy of the Romance languages. The accent affords one example of the method in which this analogy may be made useful. The Sanskrit accent is not in all cases known, but here again, arguing from the analogy of those words in which it is known, as well as from the great similarity of the Greek accent, which has fortunately been preserved, trustworthy results may be obtained. I now pass on to the mention of another point which it is necessary to bear in mind in taking a survey of the whole subject. A Desaja word may, like an early Tadbhava, be derived from a word which though not Sanskritic is yet Aryan, and such a word may not be found either in Sanskrit or in Prakrit. It would be then necessary

to search for it in all the branches of the Indo-Germanic family before giving it up. This undertaking lies beyond the scope of the present work, but the modern Aryan languages will not have been completely investigated till some one works out this portion of the inquiry. Such a word, though not used in Indian literature, may have been in use in the mouths of the people, and may be current under some slight disguise in the mouths of Lithuanian peasants even yet. To refer once more to Latin, it is well known that most of the words forming the present Romance languages are derived from what is called "low Latin," which is merely the speech of the vulgar as distinguished from that of the higher classes and from the literary style. Thus, to take one instance out of many, the word for "horse," *cheval, cavallo, caballo*, is from the Latin *caballus*, a word used by the peasantry, and only occasionally admitted into the higher style. The classical equivalent *equus* has left no direct descendant, though in modern times the words "equipage," "equitation," and so forth, have been coined from it. We are not so much concerned with the general fact as with the reasons of it, and these are so important to our subject that they must be noticed in full. The first reason is this. It is well known that the modern French, Spanish, etc., were originally mere colloquial languages, and took their rise from the corruptions introduced into the Latin spoken by the lower classes in Italy by the barbarous Teutonic tribes, who invaded and overran the countries which owned the Roman sway. The inability of Lombards, Burgundians, Goths, and Franks, to accustom themselves to the correct use of the inflectional terminations of the Latin arose, not, as some have thoughtlessly said, from their newness to the system of synthetical construction in the abstract, because we know that the inflections of the early Teutonic languages were in some respects even more complicated than those of the Latin, but from their rudeness and the as yet undeveloped state of their mental powers. They were

too rough and careless to substitute the Roman grammatical system for their own, in spite of the close resemblance between the two. Men in a low state of civilization see distinctions sooner than resemblances. They differentiate more readily than they generalize. The difference between their own language and that of the Romans¹ struck them forcibly, while it has been reserved for a much later generation to discover the fundamental unity of both. They therefore not only made havoc of the inflectional terminations of the Latin language,—in doing which they were doubtless aided by the tendency already beginning to develope itself among the Romans themselves towards an analytical form of speech,—but they also rejected such Latin words as they found any difficulty in pronouncing, substituting for them their own German words. It must also be remembered that for centuries before her fall Rome had been propped by foreign spears. Briton, Spaniard, and Gaul had fought in her legions, and guarded the palaces of her capital. Juvenal's "barbara quæ pictis venit *bascauda* Britannis" is only a type of a large class of words familiar to the later Romans, but which were quite unknown to writers of the Augustan age."² Just as we English have borrowed *loot*,

¹ The word "Romans" here does not mean inhabitants of Rome. In the ages immediately succeeding the German invasion, all the conquered races of France, Spain, and Italy, whether they were Gauls, Italians, or Iberians, were called Romans, in distinction from the conquering tribes of Teutons.

² A few examples are:

Classical Latin.		Vulgar Latin.		French.
verberare	...	batuere	...	battre
pugna	...	batalia	...	bataille
osculari	...	basiare	...	baiser
felis	...	catus	...	chat
edere	...	manducare	...	manger
ignis	...	focus	...	feu
vertere	...	tornare	...	tourner
iter	...	viaticum	...	voyage
aula	...	curtis	...	cour

Some of these words, as *focus*, *viaticum*, are in use in classical Latin, but not in the sense in which they are employed in French.

punkah, jungle, and the like, from our great dependency of India, so the Roman picked up words from Asia, Egypt, Northern Europe, and far-distant Britain. The language thus composed was undoubtedly, when tested by the standard of classical Latin, very uncouth and barbarous, and was in consequence for many centuries despised by learned men, who continued to write, and even to speak, Latin. It was not till the thirteenth century that some great minds broke through the prejudices of their age, and, influenced by a strong desire of being intelligible to the mass of their countrymen, commenced timidly and half apologetically to write in the vulgar tongue. If then this was the case in Southern Europe, we are justified, by the known analogy between the Romance processes of development and those of the modern Aryans, in believing that the same thing took place in India. The assumption is so much the more reasonable in the latter class of languages, because the Brahmans were animated by an openly avowed and steadily pursued design of keeping their writings sacred from the intrusion of the people, and, believing or professing to believe their language to be of divine origin, were more earnest and careful in preserving it from being polluted by the introduction of "low-caste" words, than the Roman poets and historians, who had no higher motives than a search after grace and euphony. Moreover, works continued to be composed in Sanskrit long after the rise of the modern vernaculars, and it is a singular coincidence in point of time, that Chand, the earliest writer in any modern Indian language, is very nearly contemporaneous with the predecessors of Dante; so that the human mind in India broke itself free from the shackles of a dead language very much about the same time as in Europe. The parallel of course does not hold good as regards the invasion of foreign races, because the Greeks, the only early invaders of India whom we know of, appear to have left little or no traces behind them in respect of language. The astrological

terms borrowed by Sanskrit writers were not obtained from Alexander or his soldiers; and the influence of the Muham-madans was not felt till much later in the day. But it holds good in so far that there was evidently a vulgar speech and a polished one. The former has perished, except that much of it which Buddhism has preserved for us; the latter continued to be written long after it had ceased to be intelligible to the masses.

The second reason is a somewhat Darwinian one. There seems to exist among words, even as among living beings, a struggle for existence, terminating in the "survival of the fittest." It is clear from all that has hitherto been discovered in linguistic science that the progress of development of all languages is from the harsh and complicated to the smooth and simple. The words in ancient languages are cumbered with a mass of letters, sounds, and combinations, which in the course of ages wear away by use, leaving short simple words behind. Tenues slide into mediæ, gutturals soften into palatals, compound letters melt into simple ones, single consonants drop out of sight altogether, sometimes carrying with them adjacent vowels.

Now it is evident that a word which at first starting is well provided with plenty of good stout consonants and broad clear vowels has a better chance of surviving through the various processes of clipping, melting, and squeezing, which it is fated to undergo in its passage through the ages, than a word which starts ill provided and weak.

Such words as *ovis*, *avis*, we see at once, have no chance; deprived at an early period of their termination, as superfluous, they sink into *ove*, *ave*, and then into *oë*, *aë*, words too slight and weak for ordinary use. It is this cause which probably led to the survival of the hard, strong words in use among the sturdy peasantry, and of the diminutives in *-culus* and *-cellus*, which give a good working basis. Thus, we find from *avicellus*,

Ital. *uccello*, Fr. *oiseau*; from *auricula*, Ital. *orecchio*, Span. *oreja*, Fr. *oreille*; and thus the weak *os*, *oris*, has given way to the coarse and strong *bucca*, Fr. *bouche*, Ital. *bocca*, Span. *boca*.

That the same process took place in Indian languages is proved by the fact that we find in the earlier Hindi poets weak words in a great state of dilapidation, just as we do in the early Provençal Troubadours. These words have now dropped out of use, and are replaced by stronger and more enduring words, which, though in their turn they have been subjected to the usual laws of development, yet retain sufficient stuff and substance to make them practically useful.

§ 8. Hitherto I have been writing as though the proportion of the three classes of words were the same in all the languages. This is, however, so far from being the case that it is necessary to enter on some details to show how the matter really stands. The point is one on which it is very difficult to come to a definite conclusion. It is characteristic, though little to our credit as a nation, that after a century of rule in India we should have produced so few good dictionaries of this group of languages. In Hindi we have Shakespear and Forbes, but neither of these works is more than a very copious vocabulary, and both are derived almost exclusively from the written language.¹ In Bengali Dr. Carey's huge quartos are a Sanskrit dictionary in Bengali characters, and Mendies's is merely a vocabulary. Sutton's Oriya dictionary is meagre, incorrect, and full of Bengali and Sanskrit words, instead of pure Oriya. The Ludiana missionaries' Panjabi work is a meritorious and accurate performance, but it can scarcely be called a dictionary, and the same may be said of Captain Stack's vocabularies of Sindhi. Shahpurji Edalji's Gujarati dictionary is a very inferior and scanty contribution to our knowledge, and I am driven, by comparison with works written in that language, to

¹ In addition to which Forbes' is a mere plagiarism from other writers.

doubt its accuracy in more than one instance. By far the best of the whole set is Molesworth's Marathi dictionary. This is really deserving of the name. The words are classed and distinguished, as literary or colloquial, full examples are given to show the way in which they are used, and meritorious, though sometimes mistaken, attempts at derivation are also supplied.

The materials being thus defective, an opinion can only be given with some hesitation; but in a general way it may be said that the proportion of Tatsama words is greatest in Bengali, Oriya, and Marathi; less in Hindi and Gujarati; and least in Panjabi and Sindhi. In the latter language, in fact, a pure Sanskrit word in its original shape is hardly ever met with. This position is easily explained by geographical and historical considerations. The first province of India which was conquered by foreigners was Sindh, the next the Panjab. These provinces, especially the former, adopted the Muhamadan religion at an early date.¹ Brahmans are, and have long been, comparatively scarce in both places. The Prakrits in use in both, especially in Sindh, were always noted for their extreme corruptness. A soil, for the most part sterile, and more suited to a pastoral than to an agricultural people, was left by the main stream of the Aryan immigrants to the cattle-tending Abhiri, or Ahirs, and to the Gujars and other rude tribes, to whom supervened the Jats, a branch of the great Kshatriya or Rajput caste, who had been excluded from fellowship for some reason which has not yet been fathomed. With so rude a population as this it is not wonderful that the language became debased, and that the constant state of warfare and turmoil in which the people lived for ages, the perpetual sieges of their towns, pillagings of their humble dwellings, wholesale slaughter of their cattle, and the other annually recurring horrors with which they were visited, should have left them

¹ IN A.D. 717.—Elliot's *Historians of India*, ed. Dowson, vol. i., p. 12.

neither opportunity nor inclination for literary pursuits, by which alone their language could have been polished and continually renewed by resuscitations of pure Sanskrit words.

In the case of Hindi and Gujarati (which is after all little more than a dialect of Hindi) we find considerable similarity to that of Sindhi and Panjabi. In Hindi there are more Tadbhava words than in any other language, and it is in this respect the most useful and instructive of all of them to the philologist. The Hindi area was, as is well known, overrun by Musulmans as much as any part of India; but there and in Gujarat the final settling down of foreigners in the country did not take place till the end of the twelfth century, more than four hundred years later than in Sindh and the Panjab, and the language, starting as it did from a tolerably pure form of Prakrit, had time to carry out a system of regular and legitimate modifications of Sanskrit words, which it would be unfair to call corruptions.¹ Such a large number of Sanskrit words underwent developmental changes, and became thus fit and useful elements of practical daily speech, that the demand for new words to express novel ideas was reduced to a minimum. It must be remembered also that such new ideas came from the Musulman invaders, who, with the idea, also brought in a word of their own to express it; so that, except in the case of the old Hindu poets, who, as their verses turned chiefly upon points of the Brahmanical religion, had occasion fre-

¹ For many generations after the victories of Kutb-ud-din Aibak, the first Musulman sovereign of Delhi, the conquerors retained their own Persian, and the conquered their Hindi. Mr. Blochmann, whose knowledge of the Muhammadan court of Delhi is singularly extensive and accurate, is of opinion that Hindi did not begin to be impregnated with Persian words, and the Urdu language consequently did not begin to be formed, till the sixteenth century—see “The Hindu Rajas under the Mughals,” *Calcutta Review*, April, 1871. The Musulmans had long been accustomed to speak pure Hindi, and it was not they who introduced Persian words into the language, but the Hindus themselves, who, at the epoch above mentioned, were compelled by Todar Mal’s new revenue system to learn Persian.

quently to recur to Sanskrit, there was in the nation at large no general demand for the Tatsama class of words.

§ 9. I must here express my views on the Hindi language in general, and I do so thus early in the dissertation, as it may be that there will be found to be some novelty in them, and perhaps they will not be readily accepted by those who are interested in supporting the claims of other languages of the class. For I should here mention, for the benefit of European readers, that there exists in India a sort of rivalry between the Aryan languages, or rather between the three principal ones, Hindi, Marathi, and Bengali, each considering itself superior to the others, and my Bengali and Marathi friends will probably not agree with me in giving the palm to Hindi until they read my reasons for so doing, and perhaps not even then.

Hindi is that language which is spoken in the valley of the Ganges and its tributaries, from the watershed of the Jamnâ, the largest and most important of them, as far down as Rajmahal, the point where the Ganges takes a sudden turn to the south, and breaks out into the plains of Bengal. This area is the centre and principal portion of Aryan India. It includes the Antarbhed or Doab between the Ganges and the Jamnâ, the "inner hearth" of the nation. It is therefore the legitimate heir of the Sanskrit, and fills that place in the modern Indian system which Sanskrit filled in the old. Under the general head of Hindi are included many dialects, some of which differ widely from one another, though not so much so as to give them the right to be considered separate languages. Throughout the whole of this vast region, though the dialects diverge considerably, one common universal form of speech is recognized, and all educated persons use it. This common dialect had its origin apparently in the country round Delhi, the ancient capital, and the form of Hindi spoken in that

neighbourhood was adopted by degrees as the basis of a new phase of the language, in which, though the inflections of nouns and verbs remained purely and absolutely Hindi, and a vast number of the commonest vocables were retained, a large quantity of Persian and Arabic and even Turkish words found a place, just as Latin and Greek words do in English. Such words, however, in no way altered or influenced the language itself, which, when its inflectional or phonetic elements are considered, remains still a pure Aryan dialect, just as pure in the pages of Wali or Saudâ, as it is in those of Tulsi Dâs or Bihâri Lâl. It betrays therefore a radical misunderstanding of the whole bearings of the question, and of the whole science of philology, to speak of Urdu and Hindi as two distinct languages. When certain agitators cry out that the language of the English courts of law in Hindustan should be Hindi and not Urdu, what they mean is that clerks and native writers should be restrained from importing too many Persian and Arabic words into their writings, and should use instead the honest old Sanskrit Tadbhavas with which the Hindi abounds. By all means let it be so, only let it not be said that the Urdu is a distinct language from Hindi.¹ By means of the introduction of Arabic and Persian words, a very great benefit has been conferred on Hindi, inasmuch as it has thus been prevented from having recourse to Sanskrit fountains again and again for grand and expressive words. This resuscitation of Sanskrit words in their classical form—a process which has been going on in the modern languages for ages, and is still at work as vigorously as ever, just as the resuscitation of Latin words has always been and is still going on in French—has done a serious injury to some languages of the

¹ The most correct way of speaking would be to say "the Urdu dialect of Hindi," or "the Urdu phase of Hindi." It would be quite impossible in Urdu to compose a single sentence without using Aryan words, though many sentences might be composed in which not a single Persian word occurred.

Indian group, inasmuch as it has led them to drop their Tadbhavas, which are the most valuable class of words that a language can possess, not only on account of the light they throw on the philological processes which the language has undergone, but because, having cast away all that was difficult of pronunciation, cumbrous, and superfluous in the ancient language, they possess the perfection of flexibility, neatness, and practical usefulness. In some languages, notably in Bengali, Tatsama words have been borrowed from Sanskrit, and employed in written works, in cases where there already existed good serviceable Tadbhavas. The result has been that the unfortunate peasant who knows no Sanskrit finds it more and more difficult every day to acquire knowledge, and the education of the masses is thus retarded. In respect of Tadbhavas, Hindi stands pre-eminent, whether it be that form of Hindi which relies principally upon indigenous sources for its words, or that other widely employed form which has incorporated the flower and grace of Persian and Arabic nouns, and which is called sometimes Urdu, sometimes Hindustani.

All the other languages of the group were originally dialects of Hindi, in this sense that Hindi represents the oldest and most widely diffused form of Aryan speech in India. Gujarati acknowledges itself to be a dialect of the Sauraseni Prakrit, the parent of Hindi. Panjabi, even at the present day, is little more than an old Hindi dialect. Bengali, three centuries ago, when it first began to be written, very closely resembled the Hindi still spoken in Eastern Behar. Oriya is in many respects more like Hindi than Bengali. There remain only the Sindhi and the Marathi. The former of these has always been very distinct from the rest; nevertheless it shades off in some respects imperceptibly into Panjabi on the one hand, and the wilder Hindi dialects of the great Rajputana desert on the other. I am half afraid to speak about Marathi, as some of the Bombay authors who have written on that language proclaim it

to be the noblest, most perfect, most eloquent, and so on, of all Indian languages. Molesworth, however, who is remarkable for the sobriety of his judgment in linguistic matters, derives a considerable proportion of the words in his Marathi dictionary from the Hindi; although he guards himself by stating that he only introduces the Hindi word because it is the same as the Marathi, and may therefore be the origin of it. It is rather hasty to assume that modern Marathi is the lineal descendant of the Maharashtri Prakrit. There is quite as much of the Magadhi and Sauraseni type in the modern Marathi as there is of the Maharashtri; and in the long period which intervenes between Vararuchi and the rise of the modern languages, so much confusion took place, and such a jumbling together and general displacement of dialects, that it is absurd now-a-days to attempt to affiliate any modern Indian language as a whole to any Prakrit dialect. Maharashtri and Marathi have little in common except the name.

§ 10. I now return from a long digression to take up the thread of my remarks. In Hindi, as I have said, the number of Desaja and Tadbhava words is much larger than that of Tatsamas. In Bengali and Oriya it is not so. These languages delight in Tatsama words, and the learned in those provinces are proud of having such words in their language, being or pretending to be under the impression that they have always been in use and have come down to the present day unaffected by the laws of development to which all languages are subject. This is an obvious error. If the Pandits' idea were true, these languages would be real phenomena, absolute linguistic monstrosities. That a language should have preserved two-fifths of its words entirely free from change or decay, while the remaining three-fifths had undergone very extensive corruption, and that many of the uncorrupted words should be such as are of the commonest daily use, would indeed

be marvellous. Such a fact can only be admitted under the following conditions. Either the word in its original Sanskrit form must have been short, strong, and simple, so that it offered no encumbrances to be got rid of, and no difficult combinations to be simplified, such as **राजा, जन, कुल**, which could not be made easier or simpler than they were: or the Sanskrit word must have embodied some ceremonial, religious, or political idea which has preserved it intact, and apart from the current of general usage, as **ब्राह्मण, दर्शन, पूजा**; in which case there are often two forms of the same word in existence—the Tatsama form used in a religious or special sense, and the Tadbhava in an ordinary sense; thus, we have **दर्शन करना**, used to express the act of visiting the shrine of an idol, and **देखना**, for the general act of seeing. In English the same thing occurs in the case of words derived direct from the Latin, which correspond to the Indian Tatsamas, and the same derived through the medium of the French, which are like Tadbhavas. Thus, we have the Tatsamas *legal, regal, hospital*, and the Tadbhavas *loyal, royal, hotel*, both sets of words coming from *legalis, regalis, and hospitalis*, respectively. In French the instances are still more numerous. A few have been given in § 7.

The excessive number of Tatsamas in Bengali and Oriya, so far from indicating a high standard of preservation, points rather to great poverty in the language. These two forms of speech were in use in the two remotest provinces of the Indian empire. The arts and sciences and the busy movements of the world centred at first in the Antarbhed, or country between the Ganges and Jamnâ, and round the great Hindu capitals, such as Dilli, Kanauj, Ayudhya, Kasi, and in later ages round the first-named, by that time corrupted into Delhi, and its twin capital, Agra. In those places, therefore, Sanskrit words expressive of a variety of ideas remained alive, and underwent gradual simplification from constant use. The

language spoken in those places, the Hindi, thus became rich in Tadbhavas. In the remote marshes of Bengal and the isolated coast-line of Orissa the Aryan pulse beat but feebly. Life was ruder and less civilized, and non-Aryan tribes mustered in great force in the plains as well as in the hills. The extremities lagged behind the heart, words which had a meaning in the courts and cities of Northern and Western India were not known to or required by the nearly naked Bengali crouching in his reed hut in those outlying regions.¹

What the colloquial languages of Bengal and Orissa were like previous to the sixteenth century we have no means of knowing. The only literature consisted of a few poetical works, whose authors did not care to keep close to the popular speech. We may, however, assume that in a country where the civilization was defective, the language would be poor. When the English came into India by sea, instead of, as former conquerors had come, by land, they were forced by circumstances to fix their capital in Bengal, thus reversing the whole system of

¹ Although in the present day Bengali surpasses all the other cognate languages in literary activity, yet the fact of its comparative rudeness until very recent times admits of no doubt. Even within the memory of Bengali gentlemen now living there was no accepted standard of the language, the dialects were so numerous and so varied. Since the vernacular literature has received such an immense development, the high-flown or semi-Sanskrit style has become the model for literary composition, but no one speaks in it. I think it is not too much to say that for spoken Bengali there is hardly yet any unanimously accepted system. Among recent works there is a class of comic productions, such as novels, farces, ballads, and satires, in which the spoken language is imitated. The writers of these works, like our own comic writers, attempt to seize the peculiarities of the various classes whom they introduce. Such works would not be intelligible to foreigners who have only studied the classical Bengali. Babu Piâri Lal Mittra, in his admirably clever and spirited novel, *Allâler gharer Duldâ*, "The Spoilt Child of the House of Allal," puts into the mouth of each of his characters the appropriate method of talking, and thus exhibits to the full the extensive range of vulgar idioms which his language possesses. In the cheap newspapers, which are now sold for a pice about the streets of Calcutta, much of this edifying stuff may be seen. It would puzzle most Europeans sadly to understand its meaning.

Indian government, whose centre had hitherto always been in the upper provinces. The language of the province adjacent to the new capital naturally attracted the attention of the ruling race. The discovery of the existence of the Sanskrit language, which occurred at a time when the English were imperfectly acquainted with the great Gangetic valley, excited the imaginations of the few learned men who at that time resided in Bengal, and they readily gave credence to the assertion that this glorious and perfect language, which they had recently found to be the sister, if not the mother, of Greek and Latin, was also the mother of Bengali. The science of comparative philology was then in its cradle. Bopp's first work did not appear till 1816, and Jacob Grimm's a little later. Our Indian philologists had no means of testing the relationship between Sanskrit and Bengali; and even if they had possessed any such means, it is doubtful if they would have used them. The early inquirers in Bengal seem to have been very much ruled by their Pandits, and swallowed, with a credulity which amazes us, the most audacious assertions of the Brahmans.

Of course, in the matter of languages, the great Brahmanical theory was, and among the orthodox still to a great extent is, that Sanskrit, a divine invention, is the only true and correct Indian language, and that all deviations from Sanskrit observable in the conversation of the masses are corruptions arising from ignorance; and that to purify and improve the vernaculars—Bengali, for instance—every word should be restored to its original Sanskrit shape, and the stream be made to run upwards to its source. Unfortunately for them, but fortunately for the world at large, this could not be done in the spoken language; but it might at least be done in books, especially in the numerous educational works which the English were then causing to be written. So completely did this idea prevail, that the honest old Tadbhavas were entirely banished from books, and a host of Tatsamas dug up from their graves, and

resuscitated for daily use. That the Sanskrit, like every other language, was subject to the laws of development, and that Bengali, like every other language, was merely the natural result of those laws, never occurred to Carey, Yates, and their brethren; and if such an idea had crossed their minds, it would have been banished as a heresy by the Pandits. Orissa at a later date followed the lead of Bengal, and from the causes above mentioned it has resulted that in both provinces the national speech has been banished from books, and now lives only in the mouths of the people; and even they, as soon as they get a little learning, begin to ape their betters and come out with the Tatsamas with which both languages are now completely flooded.¹

In Marathi the preponderance of Tatsama words, though sufficiently marked, is not so much so as in Bengali. The Marathi country was not invaded by the Musulmans till a comparatively late period, and as the Brahmans of that province have always been distinguished for learning, their efforts to retain a high type for their language, originally one of the rudest of the group, took the direction as usual in India of resuscitating Sanskrit words, and the process has not been carried so far as in Bengali only because the vernacular was richer. Marathi is one of those languages which one may call playful—it delights in all sorts of jingling formations, and has struck out a larger quantity of secondary and tertiary words, diminutives, and the like, than any of the cognate tongues.

¹ Yates's *Bengali Grammar* initiates the student into all the mysteries of Sandhi as though they were still in use, and his distress, when he is obliged to give a genuine vernacular form instead of some stilted Sanskritism, is quite ludicrous. Thus, in introducing the common pronouns *mui*, *tui*, which are of course the real original pronouns of the language, he says, "It would be well for the first and second of these pronouns, and for the verbs that agree with them, to be expunged from the language." (!) One feels tempted to ask why he did not try to expunge *I* and *thou* from English, and to substitute the much more elegant phrases, "Your humble servant" and "Your worship."

§ 11. In order to make the statement as to the constituent elements of the seven languages as clear and complete as possible, it is necessary to notice the influence of Arabic and Persian. Although Hindi is a richer language than Bengali or Oriya, it would not be just to say that the amount of Tatsama words in the latter is in exact proportion to its poverty as compared with the former. That is to say, Hindi itself was to a certain extent poor also, and the reason that there are less Tatsama words in it than in some other languages is that it has had recourse to Arabic and Persian instead of Sanskrit to supply its wants. By a curious caprice, Hindi, when it uses Arabic words, is assumed to become a new language, and is called by a new name—Urdu; but when Panjabi or Sindhi do the same, they are not so treated. It is not advisable here to stop to examine why this is; it is enough to say that where Bengali, Oriya, and Marathi have recourse to Sanskrit, Hindi, Panjabi, Sindhi, and Gujarati in a great measure recur to Arabic and Persian; but as the proportions of the Hindu¹ and Musulman population are more evenly balanced in the area occupied by Hindi than in that of any other language, the tendency to borrow from Arabic has not, as in the case of Sindhi and Panjabi, where the Musulman population is greatly in excess of the Hindu, quite superseded the practice of borrowing from Sanskrit; nor on the other hand has the Hindu population, as in the case of Bengali and Oriya, where the Hindus largely preponderate, forced Sanskrit words into the language, to the exclusion of Arabic.

This is one of those cases, many more of which will occur

¹ For the information of readers in Europe it may be necessary to explain that the word "Hindu" is always used in India as a religious term denoting those Aryans who still adhere to the Brahmanical faith, and who in most parts of India constitute the majority of the population. "Hindī," on the other hand, expresses the *language* spoken by the Hindu *population* of the country from Delhi to Rajmahal, Hindusthan proper, or, as Chand calls it, "Hinduon thān."

in the course of this essay, in which we observe a regular gradation from west to east. In the extreme west we have Sindh and the Panjab, with a vast majority of Musulman inhabitants, and a large amount of Arabic words, contrasted with a very scanty allowance of Tatsamas. Going east we come into the great central Hindi area, where the balance between the two races is more even, the numerical superiority of the Hindus being balanced by the greater intelligence of the Muhammadans, and here we find consequently the habit of borrowing from Persian kept up side by side with recurrence to Sanskrit, such recurrence, however, being less frequent in consequence of the already existing abundance of Tadbhava words. Further east again, in Bengal and Orissa, there is an immense majority of Hindus, and as a natural result a maximum of Tatsamas. In this scheme, Gujarati and Marathi stand nearly in the same place as Hindi, the former being rather more Persian, and the latter rather more Sanskritic than it. The whole seven languages may be thus grouped, the left hand indicating the Arabic pole so to speak, and the right hand the Sanskrit, and the position of the languages on the page their degree of proximity to the respective poles.

Panjâbî.	Hindî.	Bangâlî.
Sindhî.	Gujarâṭî.	Marâṭhî.
		Oṛiyâ. ¹

With regard to the Arabic and Persian element, however, it must be observed that in all the languages it is still an alien. It has not woven itself into the grammar of any of them. All the Arabic words in Hindi or any other language are nouns, or participial forms used as nouns. They conform to their own grammatical rules as strictly in the mouth of a correct speaker, as though the rest of the sentence were pure Arabic. Rarely, and quite exceptionally, occur such words as *taḥsīlnā*, *ḥabūlnā*,

¹ This position of the languages on the page is, as will be seen at a glance, nearly identical with their position on the map of India.

dāghnā, where Arabic and Persian nouns have been furnished with a Hindi termination, but the usual form is *taḥsīl karnā*, where the Hindi verb does all the grammatical work, and the Arabic noun is unaltered and uninflected throughout. When they are used as nouns, they take the usual postpositions indicative of case, but as these postpositions are merely appended to them without causing any internal change in their structure, it cannot be said that they are at all affected. In those changes which indigenous nouns undergo in the preparation of their base or crude form for receiving case appendages, the alien Arabic or Persian word is only affected in very few and exceptional instances. The rules for the preparation of the base are most intricate in Sindhi, Gujarati, and Marathi, in the first of which Arabic words, as I have said, are very numerous.

We cannot therefore take these words into consideration at all in examining the internal structure and constitution of the seven languages, though it may be proper to do so when treating of their external garb, and of the construction of sentences.

§ 12. Passing from the consideration of the constituent elements of this group of languages, to that of their structure and inflections, we are again met by the question of non-Aryan influence. It has been said that contact with the savage races of India had on the Aryans the effect of breaking down their rigid inflectional system, and causing them to substitute, for case-endings in nouns and verbs, distinct particles and auxiliaries, and that under this influence the Sanskrit gradually became modified into the present forms. There are, however, some difficulties in the way of accepting this theory, and in order to explain what they are, it will be better to state the whole argument from the beginning.

Languages, like trees, grow and develope, and their stages

of growth are well marked in the abstract, though we cannot point to any language which has gone through all the stages within historical times. The first stage is that in which all words are monosyllables without inflections or power of internal modification; and when strung together to make sentences, the same word is at one time a verb, at another a noun, at a third a particle, according to its place in the sentence. This is the syntactical stage, and is exemplified by Chinese.

The second stage is that in which some words have lost their power of being used as nouns or verbs, and can only be employed as particles, in which capacity they are added to nouns to form case-endings, and to verbs to form tense- and person-endings. This is the agglutinative stage, so called because these particles are agglutinated, or glued on, to the word which they modify. Turkish is such a language.

The third stage is that in which the aforesaid particles are no longer separable, but have become incorporated into the word which they modify, merely producing the result of varying the terminal syllable or syllables. This is the synthetical or inflectional stage, and is seen in Sanskrit.

The fourth stage is that in which the particles are not even recognizable as constituent elements of the word with which they were incorporated, but, from long use, have been worn away, so that the word stands almost bare and without terminations, as in the first stage, and new auxiliary words have to be brought in to express the necessary modifications of sense. This is the analytical stage, the stage in which English and French are at present.

It will be observed that the fourth stage comes round again to the second in some respects, notably in that the words are not altered in any way, but merely have the subsidiary particle placed before or after them, so that position in the sentence becomes once more the guide in many instances to the meaning of the individual word. Thus the English words *of*, *to*, *in*, *for*,

etc., correspond exactly to the Turkish *in*, *lah*, *dan*, and the rest, in that they have no meaning when standing alone, and though perfectly separable from the word which they modify, nevertheless cannot be used without it. The two classes are therefore very much alike, and might by inexperienced persons be easily mistaken one for another. In fact, to settle the question in which of the two stages any given language is, we have to inquire into its past history, and to ascertain what family it belongs to. Moreover, it will always be found that no language is purely analytical. The most advanced languages, such as English, still retain traces of the synthetical phase through which they have formerly passed. *Thou goest*, *he goes* or *goeth*, *went*, *gone*, though much altered from their original form, still exhibit the inflectional or synthetic type. On the other hand, agglutinative languages having not yet got so far as the synthetic stage, naturally cannot possess any traces of its system, though, to complicate the matter, there are found some languages of this stage whose agglutinative system, aided by the working of the laws of euphony, has advanced so far as to be almost synthetical,—that is to say, their particles have become so much altered by use, and are so habitually written as parts of the word modified, that they may almost be taken for inflectional terminations. So that while on the one hand we may have agglutinative languages almost entering the synthetical stage, we have analytical ones which have not quite left it.

§ 13. To apply the above remarks to the Indian languages. The Aryan dialects remained purely synthetical for many centuries after the race entered this country. When it first came here, it found the land covered with non-Aryan races, and it is almost certain that it came more into contact with them during those early ages than it did in later times, because these alien races were after a time either driven out altogether,

or remained and were absorbed into the conquering body, where they took rank at the bottom of the social system as Sudras, and learnt the speech of their conquerors, which speech in those days was Prakrit in some form or other. Now, all the forms of Prakrit are synthetical, and remained so as long as we have any definite trace of them, that is, till long after the absorption of the majority of the non-Aryans. The Bhars, Cherus, and other tribes, it is true, made a stand, and retained their individuality till a late period, and the Sonthals and Kols do so to the present day. Still the mass of non-Aryans residing in the valley of the Ganges who were absorbed at all, must have been absorbed not only many generations, but many centuries, before the Aryan languages began to show any signs of a tendency to analytical construction. It is my belief that the Indian languages did not begin to be analytical till about the ninth or tenth century, much about the same time that the European languages began to be so. Chand, though his structure is analytical, retains much that is synthetical still, and his particles and auxiliaries are in a very crude and unformed state. For the modern *kā*, *ke*, *kī*, he chiefly uses an obscure क *kā*, which does not vary with the governed noun, and is more often left out altogether. है, the ordinary substantive verb, is unknown to him; था is still only ऊँतो, three stages earlier than its present form.¹ If then the non-Aryans were the cause of the Sanskrit changing its structure from synthetical to analytical, they must have taken an uncommonly long time about it, and, oddly enough, must have succeeded in effecting the change at a time when they had for centuries adopted the synthetical structure of the Aryans.

But even apart from the improbability of this theory, it is superfluous. We want no non-Aryan influence to account for a natural and regular process in all languages of Indo-Germanic build. When, by lapse of time and the effect of those

¹ For a further examination of this point, see § 30.

numerous changes which words necessarily undergo in transmission from generation to generation, the terminations of nouns and verbs have been worn down, so that they no longer afford sufficiently clear indications of time, person, or relation, some other means of marking these necessary distinctions silently grows up. In the case of European languages there were prepositions for the noun and auxiliaries for the verb. In the Indian languages postpositions took the place of the European prepositions; but in other respects the process was precisely identical in both. It is not pretended that the European languages were subjected to non-Aryan or any other external influence to make them undergo these changes; it is admitted that they grew naturally out of the course taken by the human tongue and the human mind. The flower of synthesis budded and opened, and when full blown began, like all other flowers, to fade. Its petals, that is its inflections, dropped off one by one; and in due course the fruit of analytical structure sprung up beneath it, and grew and ripened in its stead. If this was the natural course of development in Europe, may we not suppose it to have also been the course in India? The ancient Indian languages are exact structural parallels to the ancient European languages, the modern are also precisely parallel to the modern of Europe: does it not seem to follow, as a logical consequence, that the method and process of their change, from the one stage to the other, was also parallel, and, in both cases, due to internal rather than external influences?

§ 14. But there are stronger arguments still. The non-Aryan languages could only affect the Aryans by means of some quality which they possessed, not by means of those which they did not possess. If the Kol, Dravidian, or other groups of languages were analytical, it is conceivable, if we put aside for a time the historical and geographical considerations, that they have imparted to the Aryans a tendency to

make their speech also analytical. But if they were not themselves analytical, they could not have done so.

Now it is very certain, as certain as anything can well be, that all the non-Aryan languages of India are still in the agglutinative stage. If, then, they exercised any influence on the structure of the Aryan speech, such influence would tend to make that also agglutinative; in other words, the Aryans would have had to go backwards, and try and find out what were the agglutinated particles from which their own inflectional terminations had arisen; and having found them, would have been led to use them, no longer conveniently incorporated into their words, but disintegrated and separate. Thus, a vulgar Aryan who said *homi*, for "I am," would have had to re-construct out of his inner consciousness the older form *bharāmi*, and, not content with that, to further resolve *bharāmi* into its component elements of *bhū* and *āmi*, and henceforth to use these two words adjacent to each other, but unincorporated. This we see at once is out of the question, and absurd. What our vulgar Aryan really did was in course of time to drop the final *i* of *homi*, and to nasalize the *m*, at the same time imparting a broader and more rustic pronunciation to the vowel, thus producing *है haun*. He also changed *hosī*, "thou art," and *hodi*, "he is," both into *hoī*; and thus having got two words of similar sound, he had to use the pronouns *tū* and *vaḥ* to distinguish them: which is precisely the opposite process to that which imitation of the Dravidians or Kols would have led him to follow, and precisely similar to that which his brother the vulgar Roman followed when he changed *sum* into *sono*, and *sunt* also into *sono*; so that, getting two *sonos*, he had no means of distinguishing between them except by constantly prefixing the pronouns *io*, "I," and *egli*, "they"; and just that which the Englishman followed when he changed *ga*, *gæth*, and *gath*, all three into *go*, and then had always to prefix *I*, *he*, *we*, *ye*, *they*, to make his meaning clear.

It must, therefore, be always remembered that though the modern Aryan verb presents in its structure certain similarities to the Dravidian or Kol verb, and some analogies also with the Tibetan and Himalayan verb, as well as with the noun of both, yet this very similarity to two such widely sundered groups reduces us to the necessity of admitting that the connexion is not one of family, but of stage. Tibetan and Dravidian alike are in the agglutinative stage; and, as mentioned before, the analytical stage, in which the modern Aryan languages are, resembles in many particulars the agglutinative stage, though the difference is generally to be detected by a close scrutiny.

It is not my intention here to go into the details of the non-Aryan system of inflection, or agglutination. I am very imperfectly acquainted with the non-Aryan languages; and with those which impinge most closely upon the Aryan area, very few persons can pretend to be familiar. But it seems advisable once again to raise a warning voice against the rash speculations which are the bane of philology more than of any other science, and which have so frequently been the cause of the science itself being turned into ridicule. We can only move slowly, slowly, stablishing our feet firmly on one point before we pass to another. Data are scanty, and facts hard to get at. In the above remarks all that has been done is to show how great is the *a priori* improbability of the theory that the present structure of the modern Aryan tongues is in any great degree due to non-Aryan influence. It has been said languages borrow words but never grammar. The methods of expressing ideas seem to be inborn and ingrained into races, and seem rarely to be varied, whatever be the materials employed, so that even resemblances should be shunned as dangerous, and must, unless supported by historical or other proofs, be set down in the majority of cases as accidental. To take an instance, a great deal has been made, or tried to be made, of the resemblance between the sign of the dative in Tamil,

ku (*kku*), and that of the Hindi, *ko*, and Dr. Caldwell in particular seems to have gone quite wild on the subject (see pp. 225-227 of his Grammar); but leaving aside all the Dravidian, Scythian, Ostiak, Russian, Malay, and all the rest of the jumble of analogies, it is demonstrable from actual written documents that the modern Hindi *ko* is a pure accusative or objective, and was in old Hindi *kaun* कौ, which is the usual and regular form of the Sanskrit कं *kam*, the accusative of nouns in *kah*; so that there does not appear to be the slightest reason for connecting it with anything but the cognate forms in its own group of languages.

For the reasons above given, I am of opinion that there is nothing in the structural phenomena of the modern Aryan vernaculars which may not, by a fair application of reasonable analogies, be deduced from the elder languages of the same stock; and though not prepared to deny the presence of non-Aryan elements in those languages, I do strenuously deny that they have had any hand in the formation of the analytical system which the Aryan tongues at present exhibit.

§ 15. Looking upon the change from a synthetical to an analytical state as progress and development, not as corruption or decay, it may be interesting to institute a comparison between the several languages in this respect. And here, as might be expected, we find in most instances that those languages which are most prone to the use of Tatsama words are also most backward in development.

The most advanced language is the Hindi, which is closely followed by the Panjabi and Gujarati. In Hindi the noun has lost nearly all traces of inflection; the only vestiges remaining are the modification of the base in the oblique cases of nouns ending in *â* or *ah*, as *ghorâ*, oblique base *ghore*, *bandah*, oblique base *bande*, and the terminations of the plural *en*, *ân*, *on*; and in common talk the plural is very little used,

a paraphrastic construction with *sab* or *log* being generally preferred. The pronouns exhibit a slight advance upon the Prakrit forms, but have evidently come down to modern time through Prakrit, and therefore retain more of an inflectional character. In the pronouns, each case must be derived from the corresponding case in Sanskrit, just as in an Italian verb each person of each tense is a distinct corruption of the corresponding Latin person and tense. But with the Hindi noun the case is different. The noun owes to Sanskrit merely its base, or crude form. All its cases are formed out of its own resources, resources perhaps themselves of Sanskrit origin, but put together and employed in a way quite foreign to Sanskrit ideas. Thus when a Sanskrit noun exhibits three base forms, the Anga, Pada, and Bha, all differing from each other, as राजन्, Anga base राजान्, Pada राज, Bha राज्ञ, the Hindi rejects all these niceties, and takes the simple nominative राजा for its sole base, declining it by means of postpositions राजा को, etc.

In the verb Hindi has still more markedly thrown away the Sanskrit inflectional system. The Hindi verb is an arrangement of participles conjugated by means of the substantive verbs, derived from the roots *as* and *bhū*. Only one tense is synthetical, the indefinite present, corrupted from the present indicative of the Sanskrit.

Panjabi follows Hindi as regards its nouns, having the same simplicity of declension and the same absence of inflection; although the particles used to denote cases are different from those used in Hindi, yet the method of their use is precisely the same; only bases ending in *d* are subject to modification, all others remain unchanged. The verb is identical in structure with Hindi, and the differences of form are hardly more than dialectic. The pronouns are also nearly the same as Hindi. The claim of Panjabi to be considered an independent language rests more upon its phonetic system, and its stores

of words not found in Hindi, than upon any radical difference in its structure or inflections.

Gujarati is somewhat less developed than the two preceding languages. It retains the needless and troublesome arrangement of three genders, whereas the Hindi and Panjabi have but two, and in common use wisely ignore to a great extent the existence of even those. The noun retains one inflectional case, the instrumental, only the noun ending in *o* undergoes any change of termination previous to the application of the postpositions; and these postpositions, though different in form, are used in the same manner as those in Hindi. The pronouns are almost identical with Hindi, especially with those dialectic forms of Hindi spoken in Rajputana, on the northern frontier of Gujrat.

The verb, as expounded by its unphilosophical grammarians, Messrs. Leckey and Eduljee, appears to possess a bewildering variety of forms; but a little examination shows that the five presents, seventeen preterites, and three or four futures, are really nothing more than instances of that subdivision and amplification in which grammarians so much delight. We find here again the present indefinite, an inflectional tense derived from the Sanskrit present indicative. It may be as well to state that this tense, though often most ingeniously disguised by grammar-writers, exists in all the languages of this group, as will be shown in the chapter on verbs. Gujarati has, however, another inflectional tense in the future *hoisho* from the Sanskrit *bhavishyāmi*, Prakrit *hoissam*, etc. The rest of the tenses of a Gujarati verb are merely neat and varied combinations of participles with each other, and with the substantive verbs.

Sindhi ranks next in the matter of development. It is a rough language, loving thorny paths of its own, but there hangs about it, to my mind, somewhat of the charm of wild flowers in a hedge whose untamed luxuriance pleases more

than the regular splendour of the parterre. Even as early as Prakrit times the dialect of the Indus valley shook itself free from trammels, and earned for itself from the pedantic followers of rule and line the contemptuous epithet of *Apabhrāṣa*, or vitiated. There is a flavour of wheaten flour and a reek of cottage smoke about Panjabi and Sindhi, which is infinitely more natural and captivating than anything which the hide-bound Pandit-ridden languages of the eastern parts of India can show us. I have not yet been able to procure Dr. Trumpp's *Sindhi Grammar*,¹ and am obliged to work with Captain Stack's book, the deficiencies of which strike one at every step.

In Sindhi the preparation of the base for reception of the case particles assumes great importance, there being in nearly every case three separate base-forms in the singular, one for the nominative, a second for the oblique, and a third for the vocative; and three in the plural, the plural forms being in addition various and numerous for the oblique and vocative. That these forms result from a partial retention or half-effaced recollection of the Sanskrit inflectional system is apparent, and this fact places Sindhi in an inferior stage of development to that of the fore-named languages. The cases are formed, however, analytically by the addition of particles; that indicative of the possessive relation is so multifariously inflected as to raise that case into a pure adjective agreeing with the governing noun in gender, number, and case, whereas Hindi is satisfied with three forms of the genitive particle, Panjabi with four, Gujarati requires nine, and Sindhi twenty. The subject of postpositions is not properly worked out by Stack, and I labour under some difficulty in putting it clearly to myself, and consequently to the reader. The adjective is also subject to the same multiplied changes of termination as the substantive. The pronouns, as in Hindi, retain more traces

¹ I hear that it is shortly to be published at Leipzig, if this unhappy war will permit. September, 1870.

of an inflectional system, and closely resemble those of that language. The verb is, as in other languages, composed chiefly of participial forms combined with the three auxiliaries, but, like Gujarati, the future, as well as the indefinite present, shows signs of the synthetical system of Sanskrit, and in some other respects also is less purely analytical than Hindi. The passive in particular exhibits a system of combination in which a tendency to analytical treatment is not fully emancipated from synthetical ideas.

Marathi, which I place next on the list, is, like Gujarati and Sindhi, more complicated in its structure than the other languages. These three languages of the Western Presidency, perhaps from political reasons, and the less frequent intercourse between them and the northern and eastern members of the group, retain a type peculiar to themselves in many respects, notably so in the greater intricacy of their grammatical forms. In Marathi we see the results of the Pandit's file applied to a form of speech originally possessed of much natural wildness and licence. The hedgerows have been pruned, and the wild briars and roses trained into order. It is a copious and beautiful language, second only to Hindi. It has three genders, and the same elaborate system of preparation of the base as in Sindhi, and, owing to the great corruption that has taken place in its terminations, the difficulty of determining the gender of nouns is as great in Marathi as in German. In fact, if we were to institute a parallel in this respect, we might appropriately describe Hindi as the English, Marathi as the German of the Indian group,—Hindi having cast aside whatever could possibly be dispensed with, Marathi having retained whatever has been spared by the action of time. To an Englishman Hindi commends itself by its absence of form, and the positional structure of its sentences resulting therefrom; to our High-German cousins the Marathi, with its fuller array of genders, terminations, and inflections, would probably

seem the completer and finer language. The pronoun is very little removed from pure Prakrit, combining inflectional peculiarities of a distinctly Prakrit nature with the postpositions which it possesses in common with its cognate languages. The verb is to a certain extent participial in its formation, but retains the indefinite present, though in modern usage in a preterite sense, and an inflectional future. It has also a partially inflectional subjunctive. Its combinations are fewer and simpler than those of the Gujarati; and in all its tenses the auxiliary verb, especially in the second person singular and third person plural, is so intimately bound up with the participle as to exhibit a pseudo-inflectional appearance. Though *suṭatos*, "thou dost get loose," and *suṭatāt*, "they get loose," look like inflections, they are really combinations of *suṭato asi* and *suṭatā santi* respectively.

In the Bengali noun we have a purely inflectional genitive, the legitimate descendant of the Sanskrit termination *-asya*. Bengali and Oriya are like overgrown children, always returning to suck the mother's breast, when they ought to be supporting themselves on other food. Consequently the written Bengali, afraid to enter boldly on the path of development, hugs the ancient Sanskrit forms as closely as it can, and misleads the reader by exhibiting as genuine Bengali what is merely a resuscitation of classical Sanskrit. In the peasant-speech, however, which is the true Bengali, and for which the philologist must always search, putting aside the unreal formations which Pandits would offer him, there is much that is analytical, though in the noun the genitive, dative, locative, ablative, and instrumental are synthetical, as is also the nominative plural. The rest of the plural, and sometimes the nominative also, is formed by the addition of particles expressive of number, as *gaṇ*, *dig*, and others, to which the signs of case are appended. There is no preparation of the base in Bengali, or very little. Gender is practically neglected.

The verb is simple, and formed as in other languages on the participial system. The indefinite present and the future may, however, be regarded as inflectional, as also the imperfect *dekhilām* and the conditional *dekhītām*. The pronouns are very little removed from Prakrit.

Oṛiya is the most neglected member of the group, and retains some very archaic forms. The repulsive and difficult character in which it is written, the rugged and mountainous nature of the greater part of Orissa, and its comparative isolation from the world at large, have combined to retard its development. In the noun the genitive and ablative are inflectional, and the locative is probably the same. Its verbal forms still require fuller analysis, but there is much that is inflectional apparent on the surface, though the universal participial system is also in use. In the indefinite present several of the forms retain their pure Prakrit dress, as the third person singular in *ai* and plural *anti*.

Both in Bengali and Oṛiya the singular of the pronoun and verb has been banished from polite society and relegated to the vulgar, and the original plural has been adopted as the polite singular, and been supplied with a new plural. Thus, in Oṛiya the singular *mu*, "I," is considered vulgar, and *amhe*, the old plural, is now used as a singular, and fitted with a new plural, *amhemāne*. In Bengali they have gone a step further, and made two new plurals,—one *morā*, for the now vulgar singular *mui*, and another, *amarā* for the plural turned singular *ami*.

§ 16. Having thus briefly generalized the structural characteristics of the seven languages, the character in which they are written next demands attention. The Hindi and Marathi use the ordinary Nāgarī in printed books, and their written character, as also that of Gujarati, does not vary from it more than is natural under the circumstances; the written character in all these languages being merely a rounder and more flowing

variety of the printed. Sindhi has remained till modern times almost unwritten. The rude scrawls in use among the mercantile classes defy analysis, and were so imperfect that it is said no one but the writer himself could read what was written.¹ The abandonment of the mâttrâ or top line of the Devanâgarî letters, is a common feature in all these cursive alphabets. It is either dropped entirely, as in the Kayathi character used in Behar, or a series of lines are ruled across the page first, like a schoolboy's copy-book, and the writing is hung on below as in the Modh or "twisted" current hand of the Marathas. Gujarati, for some reason, has taken to printing books in this cursive hand, without the top line, which gives it at first sight the effect of a totally different character. The letters are all, however, pure modern Nâgarî, and on showing a Gujarati book to a native of Tirhut, I found he could read it perfectly, and, what is more, very nearly understand most parts of it; and he was by no means an exceptionally intelligent man, rather the reverse.

The Mahâjani character differs entirely from that used for general purposes of correspondence, and is quite unintelligible to any but commercial men. It is in its origin as irregular and scrawling as the Sindhi, but has been reduced by men of business into a neat-looking system of little round letters, in which, however, the original Devanagari type has become so effaced as hardly to be recognizable, even when pointed out. Perhaps this is intentional. Secresy has always been an important consideration with native merchants, and it is probable that they purposely made their peculiar alphabet as unlike anything else as possible, in order that they alone might have the key to it.

¹ There are some twelve or thirteen different alphabets current in Sindh, some of which differ very widely from the others. Of late, however, the Arabic character, though very ill adapted to express Sindhi sounds, has come into common use, and a modification of the Devanâgarî is proposed for adoption, though I believe it is not actually employed by any class of Sindhians.

In the mercantile and ordinary current hands, the vowels are only partially indicated, *a* or *i* in its full or initial form generally does duty for the whole. This is of no great consequence in ordinary correspondence where the context, as in Persian, supplies the key to the meaning. Sometimes, however, difficulties arise, as in the well-known story of the merchant of Mathura, who was absent from home, and whose agent wrote from Delhi to the family, to say his master had gone to Ajmer and wanted his big ledger. The agent wrote *Bābū Ajmer gayā barī bahī bhej dījiye*. This was unfortunately read *Bābū āj mar gayā barī bahū bhej dījiye*, "The master died to-day, send the chief wife"! (apparently to perform his obsequies).¹

It would be waste of time to analyze all these current hands, even if the resources of modern European printing-presses permitted us to do so. They are not calculated to throw any light upon the historical development of the art of writing among the Indian races, being the results merely of individual caprice.

§ 17. The three languages which use a peculiar character are the Panjabi, Bengali, and Oriya. Panjabi employs the character called Gurumūkhi, a name probably derived from the fact that the art of writing was at first only employed on sacred subjects, and was practised by pupils who recorded the oral instruction of their Gurus instead of, as had been the case in earlier times, committing his teachings to memory. The alphabet consists of thirty-five letters only, omitting the grammatical abstractions ऋ, ॠ, ॡ, ॢ, as also श and ख; ष is retained, but with a different pronunciation, as will be shown hereafter. स does duty for all the sibilants. There is a special character

¹ This story is told by Babu Rajendra Lāl Mitra, in vol. xxxiii., p. 508, of the Journal of the Asiatic Society of Bengal. There is much that is good in his article, though I entirely disagree with the greater part of it.

for that harsh aspirated *r*-sound which in the other languages is indicated by ढ; and the Vedic *ṛ* ऋ is expressed by the dental *ḷ*, with a stroke like a virâma attached to its lower right-hand limb.

In tracing the origin of this alphabet, it appears that initial *a*, *â*, *u* and *û*, *e* and *ai* are almost identical with the Kutila character¹ in use from the ninth to the eleventh century A.D., which is only a development of the still older Gupta character of the fifth century, which again leads us back to the forms used in the inscriptions of Asoka in the third century B.C. The *i* and *î* exhibit the same form as the *e* for their fulcrum or initial form, though they possess the modern forms *ī* and *î* for medial use. These latter are of later introduction. Originally, as is proved by the older alphabets, *i* was indicated by three dots, or circlelets, forming a triangle with the apex downwards. These three dots being connected by lines represented the derived vowel *e*, to which a small tail was afterwards added, but, as the Oriya still shows, the medial *i* was originally expressed by a semicircle over the letter it followed, thus, *कि* *ki*. This is still retained in the Tibetan *ཀི* *ki*. In the Kutila character this semicircle was lengthened downwards on the left hand or *before* the letter to express the short sound, or on the right hand or *after* the letter to express the long sound: *कि*, *की*. Previous to this, in the earlier inscriptions the long *i* is distinguished by inverting the semicircle, thus *८*. Medial *u* was expressed in the alphabet of the fifth century B.C. by a small horizontal stroke on the right of the lower portion of a letter, thus *॒*, and *û* by two such strokes. From these have arisen the Panjabi *u* *॒* and *û* *॒॒*. *E* was at first indicated by a short horizontal stroke attached to a letter at the top and drawn leftwards. This gradually raised itself into the slanting position

¹ This section and the following should be read with the tables of alphabets in the second volume of Prinsep's *Indian Antiquities* at hand for comparison. The modern alphabets will be found in a table at the end of this chapter.

it now holds, \supset . *ai* was written with the horizontal *e*-stroke and a vertical one at right angles to it, which gradually came together as \supset . *O* was expressed by two horizontal strokes forming one cross-line, either at the top or through the middle of a letter. In the beginning of a word this stroke used the letter *a* as its fulcrum. By degrees these two strokes got raised into a sloping position, and from the Gupta inscriptions of the fifth century down to the tenth century they were so written. The form is preserved in a more elegant shape in the Tibetan, which dates from the seventh century, thus ཀོ *ko*. The Panjabi rejects one of the two strokes and gives that which remains a wavy shape to distinguish it from *e*, thus ਕੇ *ke*, ਕੋ *ko*; while in Nagari the right-hand stroke has been turned downwards like an δ ॠ , thus making ॠ . The *au* in the fifth century consisted of three strokes, thus ॠ . Panjabi has contented itself with giving an extra half-stroke to the *o*, thus ੌ *kau*.

Panjabi consonants are generally of the Kutila type, though many of them are older still. Of the Kutila type are the characters for *g*, *t*, *ṭh*, *ḍh*, *n*, *d*, *ḍh*, *p*, *bh*, *y*, *l*. It will be observed that these letters in Panjabi approach more nearly to the exact form of the Kutila than the corresponding Devanagari letters, which have been subjected to modifications from which the Gurumukhi letters have escaped.

K preserves something more like the form on the Vallabhi plates found in Gujarat, as does also the Gujarati ક , almost the only letter in that alphabet which would seem strange to one familiar with the ordinary Devanagari.

The sign for *kh* is the Nagari ष *sh*, but left open at the top. This character is also used for *kh* in western Hindi; thus for मुख we find मुष ; for आख , आष . The Nagari sign for *kh* ख has unfortunately a close resemblance to रव *rao*, and by the addition of a small horizontal stroke it may be made into ख *sva*. These resemblances have probably led to its disuse, combined as they are with certain phonetic peculiarities noticed in

Chapter IV., § 80. The *gh* is older than the Kutila in so far as it is open at the top, whereas the Kutila is closed. This letter has retained its form more exactly than any other. From Asoka's time downwards it has the form of an English capital E lying on its back, 𑀓. This ancient form is retained by the Panjabi and Kashmiri alone.¹ The Devanagari च follows the Kutila in being closed at the top, but has deviated from it in making two of the strokes horizontal instead of vertical. The Panjabi form for 𑀚 is omitted from Prinsep's table. It resembles the Kutila, but has added a loop at the foot.

The च and 𑀚 are both older than the Kutila, and closely approach the Gupta and Vallabhi types. The earliest form of this letter was a vertical stroke with a loop at the bottom on the left for *ch*, and two loops one on each side for *chh*.

The *j* is more Kutila than anything, though it has become simpler than its prototype. The Kutila itself bears very little resemblance to the more ancient form, which is that of the English E, and is retained in Tibetan ཨ.

Jh is not found in Kutila, nor is palatal *n*. The Panjabi forms for these sounds bear no resemblance to anything in the ancient alphabets, and are probably local inventions or combinations.

Panjabi *ḍ* is the Gupta letter with a curl to it, and does not at all approach the Kutila.

Panjabi *t*, like the Bengali ত, has the form appropriated in the other languages to *u*. This arises from the older form being 𑀕. In writing this and other letters, the variations of form depend upon the course followed by the pen in making the letter. If you begin at the top, and go down the left limb, and then bringing the pen back up the same limb go down the

¹ The Kashmiri character is very similar to the Panjabi, though in several instances its forms are even more archaic still.

right one, you will find the tendency to give a curve to all written lines will gradually result in a form similar to the Panjabi letter; whereas, if on the contrary you follow down the right limb first, and then taking the pen off, make the left limb separately, the result will be the Kutila *t*, from which come the Nagari and others.

The *th* is apparently a modification of the Kutila, due like the last letter to a different way of writing. In the Kutila the little top loop is first formed, and then, without taking off the pen or graver, the larger loop, and then the upright stroke. The Panjabi scribe, however, formed the large loop first, and taking off his pen, made a stroke across it, separating it into two parts, in order to produce the effect of the two loops, in which attempt he has signally failed, turning out something more like a प than a थ.

There is a curious similarity between *dh* and *p* in Panjabi. The former is written प with the character used in Nagari for *p*, while the *p* is indicated by the same character with the top open. In this it adheres closely to the Kutila, which adds a small side stroke to the *dh*, which in early alphabets is an oval, grape-shaped letter, and thus produces a character closely resembling प; the double semicircle of the Nagari थ is quite modern.

In *n* again Panjabi preserves an archaic form, and the same remarks apply to this letter as to *t*. The Panjabi *n* is that of Asoka's inscriptions, with the horizontal footstrokes sloped downwards and curved. The Gupta, Vallabhi, and Kutila forms arose from trying to form the letter by one continuous stroke without taking the pen or graver off. The Tibetan exactly reproduces the Kutila in its ण.

In *ph* we have another piece of antiquity. The form of this letter is identical with the Nagari फ *dh*. In the Asoka character the *dh* and *ph* are almost the same; the former having a curved downstroke, the latter a straight one. This is re-

produced in Panjabi, and the difference marked by an extra curve in the *ḍh*, while the *ph* is indicated by the simple ढ. Kashmiri squares the corners of the *ḍh*, and exactly follows the Gupta in its *ph*. Kutila has adopted a very different type in its फ, which has been followed by all the other alphabets. The Tibetan ञ shows how by a different order of making the strokes the ढ of the earlier alphabets might pass into the Bengali ঞ, and thence into Nagari फ; so much depends upon the order followed by the pen in forming the letter. Let any one who doubts this try the experiment of forming the Sanskrit letters backwards, beginning where the pen generally leaves off, and after writing the letter quickly half a dozen times he will be surprised to see how far it has deviated from its original shape.

Bh is the Kutila form rounded and written as though the central curve were a loop; *m* differs only in having the top open, to distinguish it from स, which in Panjabi is written like the Nagari म, owing to the Gupta character from which it is derived not having the little tail which marks the स.

R also lacks the tail, and thus approaches the Gupta rather than the Kutila type.

The *v* assimilates more to the Vallabhi form than any other; and the *h* is Gupta.

In a large number of instances the Kutila differs from the Gupta type only by the addition of a little tail at the right-hand lower corner. This tail being regarded as the continuation of the right-hand line of a letter has resulted in the vertical straight line so characteristic of Devanagari letters, such as प, य, द, व, in none of which has the Gupta character any tail, or consequently anything to give rise to a straight stroke. The Panjabi character probably took its rise from the Gupta, or it might be more accurate to say that the earlier character of Asoka underwent modifications, the type of which is uniform throughout India, down to the Gupta era, but that

after that the various provinces began to make local variations of their own. The Kutila inscriptions date from about 800 A.D. to 1100 A.D., and as far as we know the history of those three centuries there was no one paramount sovereign during that time whose authority extended over all Aryan India, as there had been at various times in the preceding ages. We may suppose the Panjab to have been politically sundered from the Gangetic provinces during a great portion of that time, and to have entered upon a distinct course of linguistic development. This will account for the archaic character of many of its letters.

§ 18. The Bengali is the most elegant and easiest to write of all the Indian alphabets. It is very little changed from the Kutila brought down from Kanauj by the Brahmans whom King Adisur invited to Bengal in the latter part of the eleventh century. Such slight differences as are perceptible arise from an attempt to form a running hand, in which it should not be necessary to lift the pen from the paper in the middle of a word. This attempt has been to a great degree successful, and the modern Bengali character can now be written with greater rapidity and ease than any character derived from the ancient Indian alphabet. Even compound letters of some intricacy have been provided with neat and simple forms, and since the introduction of printing presses into Bengal the type has much increased in elegance. A printed Bengali book is now a very artistic production in typography.

§ 19. The same praise cannot be awarded to the Oriya character, which is of all Indian characters the ugliest, clumsiest, and most cumbrous. Some of the letters so closely resemble others that they can with difficulty be distinguished. Such for instance are the following, *cha*, *ra*, where only the

slanting end-stroke distinguishes the letters, and to make it worse, the medial *e* ϵ is often so written as to be precisely like the *ch*. Then again, ϵ *ta*, and ϵ *dha*, only differ by the size of the lower loop. ϵ *u*, and ϵ *da*, are also closely similar; ϵ *ga*, ϵ *kha*, ϵ *châ*, ϵ *râ*, as also ϵ *s* (॥), and ϵ *n* (॥), puzzle the reader by the slightness of their difference; which if troublesome in print, where all the proportions of loops and strokes are rigidly preserved, is still more so in manuscript, where no attention at all is paid to the subject; and a knowledge of the language is the only guide in determining which letter is meant.

The Oriya characters in their present form present a marked similarity to those employed by the neighbouring non-Aryan nations whose alphabets have been borrowed from the Sanskrit. I mean the Telugu, Malayalam, Tamil, Singhalese, and Burmese. The chief peculiarity in the type of all these alphabets consists in their spreading out the ancient Indian letters into elaborate mazes of circular and curling form. This roundness is the prevailing mark of them all, though it is more remarkable in the Burmese than in any other; Burmese letters being entirely globular, and having hardly such a thing as a straight line among them. The straight angular letters which Asoka used are exhibited in the inscriptions found at Seoni on the Narmadâ (Nerbudda) in more than their pristine angularity, but adorned with a great number of additional lines and squares, which renders them almost as complicated as the Glagolitic alphabet of St. Cyril. The next modification of these letters occurs in the inscriptions found at Amrâvatî on the Kistna, where the square boxes have been in many instances rounded off into semicircles. From this alphabet follow all the Dravidian and the Singhalese; probably also we may refer to this type the Burmese and even the Siamese, and the beautiful character in use in Java, which is evidently of Aryan origin, as its system of Pasangans, or separate forms for the second letter of a nexus,

and Sandangans, or vowel and diacritical signs, sufficiently testify.

Whether the Ōriyas received the art of writing from Bengal or from Central India is a question still under dispute. The probabilities are strongly in favour of the latter supposition. In the flourishing times of the monarchy of Orissa, the intercourse with Central and Southern India was frequent and intimate. Raja Chûranga (or Sâranga) Deva, the founder of the Gangavansa dynasty, which ruled from A.D. 1131 to 1451, came from the south, and was said in native legends to be a son of the lesser Ganges (Godâvarî). The princes of that line extended their conquests far to the south, and their dominion at one time stretched from the Ganges to the Godavari. Kapilendra Deva (1451-1478) resided chiefly at Rajamahendri, and died at Condapilly on the banks of the Kistna, having been employed during the greater part of his reign in fighting over various parts of the Telinga and Karnata countries. This monarch also came into collision with the Musulmans of Behar. In fact, the early annals of Orissa are full of allusions to the central and southern Indian states, while Bengal is scarcely ever mentioned. Indeed, the Ōriya monarchs at one time did not bear sway beyond the Kânsbâns, a river to the south of Balashwar (Balasore), and there was thus between them and Bengal a wide tract of hill and forest, inhabited in all probability, as much of it is still, by non-Aryan tribes. The changes and developments which have brought Ōriya into such close connexion with Bengali appear in very many instances to be of comparatively recent origin.

Assuming then that the Ōriyas got their alphabet from Central, rather than from Northern, India, the reason of its being so round and curling has now to be explained. In all probability in the case of Ōriya, as in that of the other languages which I have mentioned above, the cause is to be found in the material used for writing. The Ōriyas and all the popu-

s. lations living on the coasts of the Bay of Bengal write on the
 v Tâlpatra, or leaf of the fan-palm or Palmyra (*Borassus flabelli-*
 b *formis*). The leaf of this tree is like a gigantic fan, and is
 t split up into strips about two inches in
 s breadth, or less, according to the size of
 ' the leaf; each strip being one naturally
 ' formed fold of the fan. On these leaves,
 ' when dried and cut into proper lengths,
 c they write with an iron style or Lekhanî,
 n having a very fine sharp point. Now,
 a it is evident that if the long, straight
 n horizontal Mâtrâ, or top line of the Devanagari alphabet, were



PALMYRA LEAF.

used, the style in forming it would split the leaf, because, being
 s a palm, it has a longitudinal fibre going from the stalk to the
 a point. Moreover, the style being held in the right hand and
 the leaf in the left, the thumb of the left hand serves as a
 fulcrum on which the style moves, and thus naturally imparts
 a circular form to the letters. Perhaps the above explanation
 I may not seem very convincing to European readers; but no one
 t who has ever seen an Oriya working away with both hands at
 this Lekhanî and Tâlpatra will question the accuracy of the
 e assertion: and though the fact may not be of much value, I
 ' may add, that the native explanation of the origin of their
 (alphabet agrees with this. With the greater extension of the
 ' use of paper, which has taken place since the establishment
 ' of our rule, especially in our courts of justice, the round top
 ' line is gradually dying out, and many contractions have been
 ' introduced, which it is to be hoped may be by degrees imported
 ' into the printed character.

i The Oriya letters have departed, however, less from the early
 e type than those of their neighbours, the Telingas. The vowels
 ' have much of the Kutila type, though the practice of carrying
 the style on from the bottom of the letter to the Mâtrâ has
 caused a peculiar lateral curve which disguises the identity of

the letter. Let, however, ॐ be compared with ॐ (i.e., ॐ without the Mâtrâ), ॐ with ॐ (ॐ), and the connexion will be at once visible.

Like the Bèngalis, the Oṛiyas have adopted the custom of writing the top stroke of medial *e* and *o* before the letter to which it is attached, instead of above it, as Bengali কে *ke*, কো *ko*. This practice is, however, found in some Devanagari MSS., and is sometimes used in Gujarati. Being also a high-polite Sanskrit sort of language in the eyes of its expounders, Oṛiya has been duly provided with symbols for the grammarian's letters च , ॡ , ॢ , and ॣ ,¹ and has also some very formidable snake-like coils to express the various forms of nexus. Some of these are as clumsy as Singhalese, and take as long to execute as it would to write a sentence in English. Moreover, the forms used in conjunctions of consonants are not the same as those used when alone. Thus, the character which when single is read *o*, when subscribed to ण or ष is read *n* (ण); that which alone is *th*, when subscribed to च is *ch*.

Without going through the whole alphabet letter by letter, it may suffice to say in general terms that the Oṛiya characters show signs of having arisen from a form of the Kutila character prevalent in Central India, and that its love of circular forms, common to it and the neighbouring nations, is due to the habit of writing on the Tâlpatra, Talipot, or palm-leaf, with an iron style.

§ 20. Next to the alphabets comes the question of the pronunciation of the various sounds. The vowels, with one or two exceptions, appear to retain the same sound as in Sanskrit. I say *appear*, because although the Devanagari character affords

¹ These letters being pronounced *râ*, *râ*, *lâ*, *lâ*, respectively, the common people often use them for र , रु , लु , and लू ; thus, we see *delun* "I gave," written देलुं , properly *delun*; and *rûp*, "form," रूप , properly *rîp*.

a very accurate vehicle for the representation of sounds, yet we cannot be certain what was the exact pronunciation of the Aryan letters; and in one or two instances, both in consonants and vowels, there is reason to believe that the ancient pronunciation differed considerably from that of to-day.

The short *a* अ, which in Sanskrit is held to be inherent in every consonant not otherwise vocalized, is pronounced by the western languages and Hindi—in fact, by all except Bengali and Oriya—as a short dull sound like the final *a* in *Asia*, or that in *woman*. Bengali, however, is peculiar in respect of this sound, which is only exceptionally used. That is to say, the character अ and its equivalent, the unwritten inherent vowel, is pronounced *a* only in certain words, such as the word गण “crowd,” when used to form the plural of nouns, sounded *gan*, not *gon*; at least, so says Shamacharan Sirkar, in his excellent Grammar, and no doubt he is correct to the rule, but in practice one hears *gon* constantly. In some cases the अ is pronounced as a short *o*, just as in English *not*, thus तावत *tābot*, not *tāvat*; तिरस्कार *tirosk* (not *tiras*) *kār*. Purists, however, affect to pronounce it as in Sanskrit, and would read अनल *anal*, not *onol*.

The same rule holds good in Oriya, but not to the same extent as in Bengali. In the former language there is much less fondness for open broad sounds than in the latter. In short syllables, especially when unaccented, the अ is sounded *a*; thus, कदाच *ka* (not *ko*) *dāch*. Also in syllables where the *a* is long by position, as मण्डल *mandal*, चकला *chaklā*. Before र or ड, however, it is sounded *o*, but this *o* is not such a deep full sound as the Bengali; thus, बड *boro*, but often it sounds *bara*, the *a* here being an attempt to represent a sound halfway between the short *a* in *woman* and the deep short *o* of the Bengali.

The sound of *a* is omitted from consonants in many instances where we should expect, on the analogy of the Sanskrit, to

find it. Strictly speaking, the absence of this sound should be indicated by the *virâma* or by a combination of two consônants. In the more Sanskritizing of the languages, such as Bengali, Marathi, and Oriya, the latter method of expression is frequently resorted to; but in the other languages it is practically neglected. It becomes, then, necessary to lay down rules when to pronounce this sound and when to omit it.

In Hindi it is never pronounced at the end of words, as बाल, जान, *bâl, jân*, not *bâla*. This rule is absolute and unvarying, and is not violated even when a word ends in a nexus, the difficulty of pronunciation being in such cases solved by inserting a short *a* between the two consonants; thus रत्न, शब्द would be pronounced *ratan, shabad*, and be generally so written also, as रतन, शब्द.

The root or crude form of a verb being by virtue of the above rule monosyllabic, inflectional additions to it do not render the final *a* audible; thus, मानता "he obeys," is *mântâ*, not *mânatâ*; सुनकर "having heard," *sunkar*, not *sunakar*. So also in compounds; thus, मंगलवार *mangalwâr*, "Tuesday," not *mangalawâr*.

All the other languages cut off the final *a* in the case of words in which a single consonant precedes it; but in the case of a nexus, or combination of consonants preceding, the final *a* is sounded in Bengali, Marathi, Oriya, and occasionally in Gujarati. Marathi, however, does not sound it if the first member of the nexus is स. All three languages agree in giving the *a* a short sound after य, but this sound is very slightly heard. Marathi does the same after व; thus, जीव, *jîva*, not *jîv*; प्रिय *priya*.

Besides this, in the majority of Tatsamas Bengalis would consider it proper, in reading at least, to sound the final *a*, though colloquially it would not generally be heard. Bengali, however, in certain of its inflections requires the final *a* to be heard; as in the second person singular of the present in-

dicative and imperative, कर "thou dost," *kara*, or *koro*; चल "go thou," *cholo*; also in the third person singular of the preterite करिख *korilo*, "he did," and the conditional करित *korito*, "if he did." In this latter case the short vowel is a corruption of an older *e* arising from *ai*.

In Bengali adjectives the final *a* is sounded, as बड *boro*, छोड *chhoto*, where the final *a* arises from the Sanskrit *visarga*, through Pr. *o*, and the word should consequently be written बडो, as in Gujarati. In this, as in some other cases, the Bengali having imparted an *o* sound to the *a*, makes it do duty for a long *o* ओ. Thus, it writes बल, and pronounces *bôlo*, for बोलो *bolo*, "speak"; and गम, pronounced *gom*, for गोडम, Skr. गोधूम "wheat." In this respect Oriya follows the example of Bengali.

Hindi writers often, from carelessness or ignorance, write that which is a combination of consonants in Sanskrit as so many separate letters, thus, दरसन for दर्शन, जुक्ति for युक्ति; this is merely an irregularity of spelling, and does not affect the pronunciation, which remains the same as in Sanskrit, *darśan*, *jukti*.

On a review of the whole matter, the position of the short final *a* is exactly parallel to that of its linguistic counterpart the final short *e* of early English, which we have in the modern language everywhere discarded in pronunciation, and in most cases in writing also. We have retained it as an orthographical sign in words such as *gate*, *line*, *hole*, where its presence indicates a shade of pronunciation.

The inherent *a* in the middle of a word is retained in the modern languages wherever its omission is absolutely impossible, but is omitted wherever it can be slurred over or got rid of.

§ 21. There is little to remark on the pronunciation of any of the other vowels except अ. Hindi generally, and Panjabi always, ignore this grammarian's figment, and write it plain and

simple र, which saves a great deal of trouble and confusion. Marathi and Oriya, in their desire to be very Sanskritic, introduce this letter; but the vulgar have turned it into *ru* in pronunciation, and in Oriya the character for this sound is used for र and रू. In Gujarati also र is substituted for *ri*.

Inasmuch as *a* in Bengali has become *o*, so *ai* ऐ becomes *oi*, and *au* becomes *ou*. It is almost impossible to convey by any written symbols the exact sounds of these vowels to the ear. Oriya has the same peculiarity. The two sounds are fairly represented by the accent of an Irishman in speaking of his native country as "Ould Oireland"; that is to say, there is a *grasseyant* or half-drawling tone in their pronunciation. This, however, is not considered correct by purists, who prefer to sound these vowels as in Sanskrit, and would say *baidh*, वैध, not, with the vulgar, *boidh*.

In some instances in Bengali the vowel ए *e* has a short harsh sound, like that of English *a* in *hat*. Thus एक "one," sounds *yack* or *ack*.

§ 22. In the pronunciation of the consonants there are a few peculiarities of a local and dialectic sort, which require notice. The palatal letters, as might be expected, display many divergencies of pronunciation. It is strange that those sounds so simple to an English mouth, the plain *ch* च and *j* ज, should apparently present such difficulties to other nations. In Europe the Germans, having used their *j* for च, and their *ch* for छ, or for a sound not representable by English letters, have had to fall back upon all sorts of combinations to represent ज. They write it *dsch* and च *tsch*; and of late they have got to *k* for च and *g* for ज, a characteristically logical, but I fear I must add also a characteristically unintelligible, method of expression. The French have turned their *j* into a half-*z* or *j̃*, and to get ज they have to write *dj*; so also, having turned *ch* into ش *sh*, they are obliged to write *tch* for च. The Italians,

to express the palatal media, have prefixed a *g* to their *i*, and pronounce *gi* = ज; for च their *c* does duty before *e* and *i*, but before *a*, *o*, *u*, they are obliged to intercalate an *i*, and चंद्र would be *ciandra*. The Spaniards have the true *ch* = च, but their *j* is = ज; so for ज they must write either *y*, which is a fainter sound than the true *j*, or some other combination of letters.

Similar in degree, though different in the turn which it has taken, is the confusion as to *j* ज in some of the Indian languages. The Hindi, truest and most central type of all, holds fast the correct pronunciation; but Panjabi rather finds it a stumbling-block. When a Panjabi says मझ *majh*, "a buffalo-cow," the sound he produces is something very odd. It might be represented by *meyh*, a very palatal *y* aspirated; perhaps in German by *möch*, or rather, if it may be so expressed, with a medial sound corresponding to the tenuis *ch*.¹ The Bengalis, again, are fond of inverting *j* and *z*, especially in words borrowed from the Arabic: thus, they say *Esāra* for إجازة, but *hājir* for حاضِر.² This is the more strange as there is no *z* in the Sanskrit alphabet; and, consequently, our modern high-pressure improvers (English this time, not Pandits), who are for ever fidgetting and teasing at the unhappy Indian vernaculars, and trying in an irritating, though happily ineffectual, way to twist and bend them according to their own pre-conceived ideas, have adopted the bright device of using a ज with a dot to it for *z*. All the dots in the world will never made a Hindi peasant say *z*; our friends may write हाजिर, जालिम, as much as they like. From the days of Chand, when these words first came into India, till now, the Indians have said *hājir*, *jālim*, and will probably continue to say so long after our

¹ This remark is more exactly applicable to the western Panjabis. I find it in my note-book made at Gujrat and Jhelam in 1859.

² They do so also in words of Sanskrit origin in many instances. I believe, however, this is more of a personal and individual characteristic than a law of the language, as I have heard some persons pronounce it more as *z* than others.

dot-makers are forgotten. But they have never, oddly enough, thought of dotting the Bengali **জ**, **জ**, which is really often pronounced *z* without the help of dots.

Marathi has two methods of pronouncing the palatals. In Tatsamas and modern Tadbhavas and before the palatal vowels **इ**, **ई**, **ए**, and **ऐ**, **च** is *ch*, and **ज** *j*; but in early Tadbhavas, Desajas, and before the other vowels, **च** sounds *ts*, and **ज** *dz*. This peculiarity is not shared by any of the cognate languages, while, on the other hand, the *ts* and *dz* sounds, so to speak the unassimilated palatals, are characteristic of the lower state of development of the non-Aryan, Turanian, or what-you-will class of languages. Tibetan on the one side, and Telugu among the Dravidians on the other, retain them. Marathi, from its juxtaposition to Telugu and other non-Aryan forms of speech, might naturally be expected to have undergone somewhat of their influence, and this pronunciation of the palatals is probably an instance in point.

By the expression "unassimilated palatals" I mean that, whereas in the Aryan palatals the dental and sibilant of which they are composed have become so united into one sound that the elements can no longer be separately recognized, in the Turanian class the elements are still distinct. The earlier languages of the Aryan and Semitic families knew no palatals. Even Hebrew has got no further than **צ** *Tsadde*; Greek and Latin probably had not these sounds either. They are then of late origin, and though as regards the formations in which they occur they must be considered as sprung from the gutturals, yet they are so derived not directly, but through the often observed change from *k* into *t*; so that by adding a sibilant to the guttural we get from *k* + *s* into *t* + *s*; this change being facilitated by the fact that in Sanskrit at least the sibilant employed is a dental, and naturally, as will be shown in Chapter IV., draws over the guttural into its own organ, thus, **वाक** + **स** (= **वात** + **स**) = **वाच**.

The cerebrals are pronounced very much like the English dentals. At the beginning of a word, or when forming part of a nexus, **ड** and **ढ** are sounded *d* and *dh* respectively; but in other situations they take the sound of hard *r* and *rh*. This is not the case, however, in Panjabi, which, having invented a new character for the sounds of *r* and *rh*, retains the *d* and *dh* sounds for **ड** and **ढ** in all cases. In Hindi, on the contrary, the *r*-sound predominates, and is often written **र**, especially in the early poets, so slight is the difference between the sounds. The *r* sound also prevails in Bengali and Oriya: thus, **बड** is pronounced *bar* or *boro* in all three. **गाडी** is in all three *gârî*, but in Panjabi *gâdî*. Marathi also adopts the *r* sound, but pronounces it more harshly than in the above-mentioned languages, so as to approach more closely to the *d* sound. Sindhi has special eccentricities with regard to these letters. The *d* and *r* sounds of **ड** are both used on the same principles as in Hindi. The *d* sound and the letter **ड** itself are very much used in Sindhi, etymologically often replacing **द**. There is besides a sound expressed by this letter which has a very Dravidian look about it. It is a sort of compound of *d* and *r*; **चंडु** "the moon," is said to be pronounced *chandru*. The letter **ट** has also the same sound of *r* mixed up with it; thus, **पुट** "a son," is to be pronounced *putru*. In these cases the Dravidian aspect vanishes, and we see merely a careless method of writing, which makes **ट** and **ड** do duty, by custom, for **च** and **ट्र** respectively. As the European has been at work on the Sindhi character, it is a pity he did not write these words with **ट्र** and **ड्र**, instead of falling into the favourite maze of dots which always distinguishes artificial and exotic labours in linguistics.

The dentals and labials call for no remark; with regard to the former a detailed examination of their origin and pronunciation will be found in Chapter III.

§ 23. The semivowels **य** and **व** have much in common. In

the western languages; Sindhi, Gujarati, and Marathi, ज is quite distinct from य. This latter has a more liquid sound, and is often dropped at the beginning of words. Panjabi and Hindi turn the Sanskrit य into ज in most cases, and express it in writing by the ज.¹ Bengali and Oriya use the character य, but sound it ज *j* in nearly all cases. Thus, the Sanskrit word योजन would be pronounced in M., G., and S. *yojan*. In P. and H. it would be written जोजन, and pronounced *jojan*. In O. and B. it would be written योजन, or even योयन, and pronounced *jojan*. So completely has य acquired the sound of *j* in these last two languages that when य is intended to retain the sound of *y*, as in Tatsamas, a dot is placed under it to distinguish it. In Oriya ordinary writers even go so far as to write with the य words which have a ज in Sanskrit, as यन्तु for जन्तु.

Similarly with regard to व, we find G., M., S., and in this case also P., keeping it quite distinct from ब. The former sounds *v* or *w*, the latter *b*. Panjabi is rather uncertain on this head, writing the same word indifferently with either ब or व. Hindi writes every व as ब, and pronounces it so also.² Bengali and Oriya have but one character for both sounds, and people of those nations are unable to pronounce *v* or *w*. They might come under the same head as those Neapolitans of whom it was said, "Felices quibus vivere est bibere," were it not that, instead of the generous juice of the vine, the Bengali drinks muddy ditch-water in which his neighbours have been washing themselves, their clothes, and their cattle.

¹ The cases in Hindi in which य is retained are chiefly in the terminations of Tatsamas used in the early poets, as वानीय *vānīya*, where the Skr. pronunciation is preserved; and in the pronominal forms यह, यौ, यहां, the first and last of which are often written and pronounced इह, इहां.

² Hindi retains the Sanskrit pronunciation of *v* in old Tatsamas and in वह, वहां, वैसा, and such words. Here again we often hear and see उह, उहां, etc.

In those cases where व is the last member of a nexus, it is not heard, but has the effect merely of doubling the preceding letter: thus द्वार is to the B. and U. *dd'âr*,¹ pronounced with a dwelling on the *d* and a slight contraction of the lower lip, as though the speaker would, but could not, effect the contact required to produce the full *v* sound. Thus also अश्व is *ashsh'a*, बालेश्वर is *Baless'ar*.

These peculiarities may be thrown into a little table, thus :

	MARATHI, GUJARATI, SINDHI.	PANJABI.	HINDI.	BENGALI, ORIYA.
य	<i>y</i>	<i>y</i> and <i>j</i>	seldom used	<i>j</i>
ज	<i>j</i> or <i>dz</i>	<i>j</i> and <i>y</i>	<i>j</i>	seldom used
व	<i>v</i> , <i>w</i>	<i>b</i> and <i>v</i>	seldom used	<i>b</i>
ब	<i>b</i>	<i>v</i> and <i>b</i>	<i>b</i>	seldom used.

With regard to ल Bengali and Oriya again get into difficulties, often confounding this letter with न. Thus, at times they will write *l* and say *n*, and at others they will do the reverse. Examples of this confusion will be found in Chapter III.

र exhibits no peculiarities of utterance.

§ 24. The sibilants appear to have altered very much from Sanskrit. Panjabi gives itself no trouble on the subject, but abandons ष and श, and retains merely स for all sibilation. This language, however, is averse from this class of sounds, generally altering them into *h*.

Sindhi equally rejects ष, and श is used in the most illegible scrawls as an equivalent to स. In other languages, where it occurs, pronounced as *s*, though it is not in transliterating the Arabic *sh* ش. In Bengali and Eastern Hindi the same phenomena will be noticed.

¹ This little *o* at the top is *o* to express a sort of half-heard fleeting labial tone, like a labial *Sheva*, if such a thing could be.

Hindi varies in its treatment of the three sibilants. In the eastern part of its area, in Tirhût, Purneah, and Bhagalpûr श is the character used in writing by the Kayaths and mercantile classes, and in the extensively employed system of revenue accounts kept by the Patwâris and other local revenue and rent-collecting agents. It is written generally as in Gujarati, without the Mâtrâ or top line. The letter श is, however, in those districts looked upon as equivalent to, and pronounced in the same way as, स s. In fact, the people seem unable to pronounce the sound of sh. In Arabic words, which occur frequently, as the population is mostly Musulman, the ش is pronounced s. Thus, we hear *sekh* for *shekh*, *sâmil* for *shâmil*, and the like. Towards the centre and west of Hindustan,¹ however, this inability disappears, though in Sanskrit words of all classes there is very little to mark the difference between the two letters. ष has long been appropriated to express *kh* both in Hindi and Panjabi.

Bengali reverses the whole series. It has in use all three sibilants, but pronounces them all as sh. Thus, सकल is to a Bengali, not *sakal*, but *shokol*; षष्ठ *shashto*. To compensate, however, it treats the Arabic ش sh as s, saying, as noticed above, *sekh*, *sâmil*, for *shekh*, *shâmil*. Arabic س and ص become sh; سائل is *shâil*; صاحب *shâheb*. Purists pronounce श and स as s, when they form the first member of a nexus in which र, ञ, or न form the second, as अवन *srobon*, शृगाल *srigâl*; but this refinement is overlooked by the vulgar.

Oriya retains in its alphabet the three characters, but except in the so-called high style, श and ष are not much used. Both in Orissa and Bengal the inquirer is met with this difficulty that the learned classes persist in using Sanskrit words in their writings, without regard to the usage of the mass of their

¹ Hindustan must throughout these pages be understood in its literal and restricted sense of the area from Delhi to Rajmahal, within which the Hindi and its dialects are the mother-speech.

countrymen ; and even when using words which are commonly current among the people, our Pandits will alter the spelling back again to what it was in classical Sanskrit, thus ignoring the changes made by time ; and baffling the endeavours of those who wish to seize the language as it is, by presenting it to them in the guise which the Pandits think it ought to wear. In no part of India is it more necessary to go amongst the people, and try to find out from their own lips what they do really speak. Often, however, when a witness in court has used some strange and instructive Tadbhava, and I have asked him to repeat the word, that I may secure it for my collection, some Munshi or Pandit standing by will at once substitute the Tatsama form, and rebuke the peasant for using a vulgar word ; so that all hope of catching the word is gone for that occasion.

Gujarati uses **स** in preference to **श**, though there is some confusion in the employment of these two letters, and in many parts of the province the peasantry, as in the Panjab, evince a tendency to reject the sibilants and substitute for them **ह**.

Marathi employs **श** and **स** indifferently, to such an extent that even the learned and careful compilers of Molesworth's Dictionary are often puzzled to decide which to use. Especially is this the case in early Tadbhavas and Desajas, where Molesworth and his Brahmans are often widely wrong in their ideas of derivation. In Marathi **श** is not quite *sh*, nor yet quite *s* ; it inclines more to the former than to the latter, inasmuch as the palatal nature of **श** renders it necessary to pronounce it with somewhat of that clinging of the tongue to the roof of the mouth which is characteristic of the letters of that organ. Of the two principal dialects into which Marathi is divided, the Dakhani, or that spoken on the high table-lands above the Ghats, inclines more to the use of the clear, sharp, dental **स**, while the Konkani, spoken in the low line of country fringing the coast, prefers the softer and more clinging **श**. So also Bengali, the language of a low-lying country on the sea-shore,

makes स sound as *sh*. It is an interesting question, whether the influence of climate has been at work, but one which cannot be gone into here.

§ 25. The nasals of the five organs are even in Sanskrit somewhat affected and over-refined letters. ङ and ञ have characters to express them in all the languages except Gujarati, which, not possessing any of the "pruritus Sanskritizandi," so to speak, does not use characters for sounds which it does not require. Nor does Hindi. In all the other languages, except Sindhi, these characters are only used in Tatsama words as the first element of a nexus. Sindhi, however, has two sounds, *ng* and *ny*, for which these two characters are used. They stand alone as pure guttural and palatal nasals respectively. Thus, in सिङ्गु *sing-u*, "a horn"; अङ्गु *ang-anu*, "a court-yard"; अङ्गु *ang-arū*, "a coal"; we have derivatives from Skr. शृङ्ग, अङ्गण, and अङ्गार. In Hindi and most of the other languages these words are written with the anuswāra सिंग, अंगन, and अंगार. The sound of the Sindhi ङ is that of *ng* in *sing*, *ring*, which is one homogeneous sound, and as such differs from the Hindi ङ with anuswāra, which is the *ng* in *finger*, *linger*. In dividing the syllables of these words we should write *sing-ing*, but *fin-ger*. The latter is really *fing-ger*.

Similarly ञ in Sindhi is *ny*, the Spanish ñ in *Señor*, *extraño*, which are pronounced *Senyor*, *extranyo*, and in which the ñ is, like the Sindhi ञ, a *compendium scripturæ*, or simpler way of writing *ne* or *ni*, as in the Latin *senior*, *extraneus*. It is, however, not unfrequently for double *n*, as in *año* = *annus*; or for *mn*, as in *daño* = *damnum*, *doña* = *domna* (low Latin for *domina*; or for *ng*, as in *uña* = *unguis*; or *gn*, as in *seña* = *signum*. Thus, कन्या *kany-ā*, "maiden," is Skr. कन्या; धान्य *dhāny-u*, "grain," Skr. धान्य; वज्रगु *vany-anu*, "to go," Skr. वज्रगु. It is, therefore, less strictly palatal than ङ is guttural,

as it embodies only the semivowel of its organ, whereas the **उ** embodies the media.

ए is in use in all the languages, and its sound is clearly distinguishable from that of **न** in most provinces. In many parts of Hindustan and the Panjab, however, I do not think any ordinary observer would notice the difference, particularly in the countries bordering on the Ganges, where contact with Musulmans has softened down, with good effects, many of the asperities of the old Aryan utterance. So much so is this the case, that in ordinary Hindi **न** does duty for all nasals. In Sindhi **ए** has a deeper sound than in the other languages, and embodies the semivowel of its organ, producing a sound like *nr*, or the Pushtu **ن**, as stated by Dr. Trumpp. It in this way presents an analogy to **ञ**, which also embodies the semivowel of its organ.

न and **म** call for no remarks, being pronounced as in other languages *n* and *m*.

§ 26. In the pronunciation of the compound consonants the various languages exhibit greater power than Sanskrit, in so far as, with a few exceptions, the modern Indians are able to pronounce every imaginable combination; while Sanskrit requires that the former of two consonants shall be modified so as to bring it into harmony with the latter. Whether this rule arose from inability to pronounce a nexus of dissimilar consonants, or was deliberately introduced with a view to produce euphony, need not here be discussed,—the result is the same in either case. But Hindi, by rejecting the final short *a* of all its words, obtains an immense variety of words ending with consonants; and as these words, whether as nouns or verbal bases, have to be followed by inflectional particles which begin with consonants, every conceivable combination of consonants occurs. Thus, we have a media followed by a tenuis in **लगता**, which is

not *lagatâ*, but *lagtâ*; बीजका *bījka*; an aspirate media preceding a tenuis in बूझकार *būjhkar*; and many others which would be inadmissible in Sanskrit. Such a process as altering the final consonant of a verbal base to bring it into harmony with the initial consonant of a termination, is quite unknown to the modern languages.

In those combinations which I have in Chapter IV. called the mixed and weak nexus, Bengali betrays some weaknesses. One of these, in which the semivowel व follows a consonant, has been noticed in § 23. Another is seen in compounds whose last letter is म. In this case the *m* is not distinctly heard, but gives a subdued nasalization to the preceding consonant, which is pronounced as though double. Thus, स्मरण is in Hindi *smaran*, but in Bengali it sounds *sh^moron*; लक्ष्मी is not *Lakshmi*, but *Lakhhkhi*; पद्म is not *padma*, but *podda*. It is almost impossible to express the exact sound of this nexus—it must be heard to be understood. In the words कृष्ण, विष्णु, the Bengalis and Oriyas in speaking substitute ट for ण, and the former add an anuswâra after the final vowel, so that these words sound in Bengali कृष्ट *Krishtan*, बिष्ट *Bishtun*, and in Oriya *Krushto* and *Bishtu*. Thus, too, the Sanskrit वैष्णव a “Vaishnava,” a sect very common in Orissa, is corrupted into *Boishnob*, *Boishtnob*, *Bastab*, and even *Bastam*.

§ 27. Sindhi has four sounds peculiar to itself, or, to speak more accurately, it has four characters, ग, ज, ड, ब, which are not used in any other language. Dr. Trumpp is of opinion that these four characters represent four simple sounds (*einfache Laute*); it is, however, evident from his own remarks that they are only methods of expressing रग, ज्ञ, डु, and ब्र, respectively, and the analogy of the Bengali pronunciation in the examples of nexus given above helps us to understand how these letters have come to be written with a single character, namely by the stress laid on the first in the effort to give its full value and

strength to both. There, however, exist many instances in Sindhi in which ज़ or ग़ do not represent a double letter ;

Thus, we have Sindhi जगु, जगटु for Skr. जगत् world.

”	”	जंघ	”	जङ्घा leg.
”	”	जउ	”	जतु lac.
”	”	जमू	”	जम्बू <i>jamun</i> .
”	”	जौर, जह	”	जलूक leech.
”	”	जादो	”	जामातु son-in-law.
”	”	जार	”	जाल net.
”	”	जिभ	”	जिह्वा tongue.
”	”	गेहूं	”	गोधूम wheat.
”	”	गहिरा	”	गभीर deep.

and many others. It is only fair, however, to explain that Sindhi is one of the languages which I only know from books, and have only once heard spoken, and that I take the above words from Stack, while the theory of the origin of these sounds comes from Trumpp. It is possible that the latter author would not write the above words with the dotted letter, as he generally condemns Stack for inaccuracy. The remark therefore must be taken with this modification. Trumpp's description of the sounds certainly confirms the view he takes. He writes, "You shut your mouth and express a dull sound, then open the mouth, and allow the *g* (*j*, *d*, or *b*) to sound forth."¹ This is just the way in which the Italians pronounce *ebbi*, *poggio*, *maremma*, with a dwelling on the first of the two letters, *ebb-bi*, *poj-j-jo*, *maremm-ma*. He adds in another place, "These four sounds, which are originally doubled, have now, however, established themselves more or less as single independent sounds. They are found consequently in many words in which

¹ "Man schliesst den Mund, und drückt einen dumpfen Laut herauf, öffnet dann den Mund und lässt den Laut *g* (*j*, *d*, *b*) austönen."—*Zeitschrift der deutschen morgenl. Ges.*, vol. xv., p. 702.

etymologically no reduplication can be proved to exist, but the hardness of the pronunciation can be explained by adjacent circumstances, *e.g.* गोड़ 'a village,' Pr. गोड़, Skr. गोष्ठ." This is the same remark as has been illustrated above, though, in the absence of properly spelt dictionaries, it is difficult for one not resident in the country to determine in which cases the dotted letter should be used.

It is often found to be the case, especially in unwritten languages, in which consequently there is no universally received standard of spelling, that when any peculiar pronunciation has established itself in the popular speech, it is extended through carelessness to cases where it ought not properly to occur, and it is readily conceivable that this may have taken place in a wild and uncultivated language like Sindhi. At the same time it is to be hoped that those who take this language in hand will not fall into the common error of all Indian linguists, of representing the words, not as they are, but as they think they ought to be, remembering that it is the popular practice and custom, "usus," as Horace says,

"Quem penes arbitrium est, et jus, et norma loquendi,"

and not the Pandits or would-be reformers.

§ 28. Some remarks on the literature of these languages may now be offered, though to give a full and complete review of this subject would occupy many volumes, and would be beyond the limits of my task. All that will here be done is to give such brief general statements as may afford to the reader a tolerably accurate idea of how the various modern languages stand in this respect. Although the majority of the written works in the Indian vernaculars are to the European mind very tame and uninteresting, yet it is by no means accurate to say that there is nothing worth reading in them. Religion has

always been the chief incentive to writing in India, whether ancient or modern; and the vehicle chosen has been until quite recent times verse, and not prose. The earliest writings of the modern period, with one notable exception, are religious poems. This exception is the first of all in point of time, the *Prithirāja Rasan* of Chand Bardāi, in which the ancestry, birth, heroic deeds, and final overthrow of Prithiraj of the Chauhān tribe of Rajputs, the last Hindu King of Delhi, are recited in many thousand lines of doggerel verse by Chand Bardāi, a native of Lahore, who was attached to that monarch's court in the capacity of Bhāt or bard, and who was an eye-witness of the historical scenes which he relates. But even in this professedly historical work the influence of tradition is too strong for the poet, and his opening canto, a very long one, is occupied by hymns to the gods, catalogues of the Purans, and legends taken from them; throughout his book the customary intervention of celestial beings occurs; on every joyful occasion the gods assembled in their cars shower down flowers; after every battle Shiva with his necklace of skulls dances frantically among the corpses, drinking the blood of the slain; birds and beasts talk; sacrifices produce magical effects; and penances are rewarded by the appearance of the god to the devotee, and by gifts of superhuman skill or power. So that here again religion, the old deeply rooted Hindu religion, asserts itself, and a legendary and miraculous element comes in side by side with accurate history and geography. The date of the composition of the poem is probably about A.D. 1200. Subsequent Hindi literature consists almost entirely of long, tiresome religious poems, together with some of a lighter type, translations or rather *rifacimenti* of older poems, such as the *Ramayana* of Tulsi Dās, none of which are particularly worth reading, except for the light they throw on the gradual progress of the language; and even this light is often obscured by the arbitrary changes and corruptions which the authors permit themselves to use to

satisfy the exigencies of their rhythm. The reiterated employment by them all of a certain set of stock words and phrases deprives their works of any appearance of individuality or originality, which, added to the extremely dull and uninteresting nature of the subject-matter of the poems themselves, makes them on the whole about the least attractive body of literature in the world. Still, there are, as I have said before, some exceptions: the seven hundred couplets of Bihâri Lâl contain many pretty, though fanciful, conceits, and are composed in extremely correct and elegant verse; and here and there among the religious poems may be found meditations and prayers of some merit. The *Ramayân* of Tulsi Dâs is probably only admired because the masses are unable to read the original of Valmiki. In modern times a perfect cloud of writers has arisen, amongst whom, however, it is impossible to single out any one deserving of special mention. The introduction of the Persian character, in supersession of the clumsy Nagari, has rendered the mechanical process of writing much easier and more rapid, while many good lithographic presses in all parts of the country pour forth books of all descriptions, the majority of them undoubtedly pernicious trash, but some here and there of a more wholesome tone, which, though probably not destined to live, may pave the way for productions of a higher style.¹

Bengal, however, has now far distanced all her sister provinces in literary activity. The rise of modern Bengali literature is due to the great reformer Chaitanya in the fifteenth century. The litanies or Kîrtans which, though they had existed before his time, he rendered popular, may still be collected, and I believe some Bengali gentlemen have made collections of them, with a view to publication. One, attributed to Vidyâpati,

¹ Those who wish to pursue this subject further should read M. Garcin de Tassy's *Histoire de la littérature Hindoustani*, in which an immense amount of information is collected. The learned author is an ardent admirer of Hindi literature.

the most celebrated, and probably the first in point of time, of the old Bengali poets, runs as follows :

जनम अबधि हम रूप निहारनु नयन ना तिरपित भेल ॥
 सोइ मधूर बोल अबणहि शुननु श्रुति पथे परश ना गेल ॥
 कत मधू यामिनी रभसे गोयाइनु ना बुझिनु कैकन ना केल ॥
 लाख लाख युग हिये हिये राखनु तबु हिया जुडन ना गेल ॥
 यत यत रसिक जन रसे अनुगमन अनुभव काज ना देख ॥
 विद्यापति कहे प्राण जुडाइते लाखे ना मिलल एक ॥ ० ॥

"Since my birth I have gazed on (his) form, (yet) my eyes have not been satiated,

Friend ! that sweet voice I have heard with my ears, (their) touch has not left the passage of hearing.

What sweet nights in love have I spent, and knew not what happened. For millions of ages I have kept heart to heart, still my heart has not cooled.

Many, many lovers pursue (their) love, the true lover no one sees ; Vidyapati saith, to cool the soul in a lakh not one can be found." ¹

Here तिरपित = तृप्त ; गोयाइनु a causal from गम ; कैकन is merely a Bengali way of writing स (see Chapter III., § 58). The language of this poem closely resembles that spoken at the present time in Tirhut. The preterites भेल, गेल, and केल are still in use there, though the first and last are now obsolete in Bengal proper. Such forms as निहारनु for निहारिलाम are still heard in conversation, though now banished from books.

The language of these poems differs very little from early Hindi, as will be seen from comparing it with the extract from Chhand given in § 5 (note). Kabi Kankan, who lived about 1570, and the author of the Chaitanya Charanāmṛita, are also celebrated early Bengali writers. The Bengali poets Kasidās

¹ For this hitherto unpublished poem I have to thank my friend Babu Jagadishnath Rai, who has also procured for me others of the same kind. Vidyapati's date is fixed as early as A.D. 1320 ; but I am disposed to doubt this.

and Kṛtibās wrote modern versions of the Mahabharat and Ramayan. Raja Krishna Chandra of Nadiya collected round him a small circle of poets, whose works are still very much admired, amongst whom Bhārat Chandra Rai holds the foremost place, though it is stated that his popularity is on the wane, in consequence of the rise of a sounder and more wholesome literature. A species of Fescennine verse called *Kabi* (probably for *Kabit*) was also highly popular in the last generation; these verses were recited by two companies of performers, who lavished the most pungent abuse and satire on each other, to the great delight of their audience. Following upon the poets of this school comes Iswar Chandra Gupta, a sort of Indian Rabelais, who enjoyed considerable reputation fifty years or even less ago. But Bengal has advanced so fast during the last generation that all these old-world authors are already left far behind in the dimness of a premature antiquity. And it is well that they should be. Bengali literature was not in their hands progressing in any definite or tangible direction, unless it were in that of filth and folly. Modern Bengali writers, all of whom are of the present age, may be divided into two classes, the Sanskritists and the Anglicists. The former are chiefly responsible for the solemn pompous style, overloaded with artificial Tatsamas, which they, and they alone, are able to understand, and which make the literature which they produce more like bad Sanskrit than good Bengali. The frigid conceits, the traditional epithets, the time-honoured phraseology, recur over and over again *ad nauseam*, and the threadbare legends of the Hindu creed are worked up into fresh forms with a "most damnable iteration." Opposed to these is a school of young writers, who pour forth novels, plays, and poems in considerable abundance, and of very unequal merit. Babu Piāri Chand Mittra, who writes under the *nom de plume* of Tekchānd Thākur, has produced the best novel in the language, the *Allāler gharer Dutāl*, or "The Spoilt Child of the House

of Allâl." He has had many imitators, and certainly stands high as a novelist; his story might fairly claim to be ranked with some of the best comic novels in our own language for wit, spirit, and clever touches of nature. Michael Madhusûdan Datt, a Christianized Hindu, has also written a great many works, some of them very good. And "Hutam," as he calls himself, or Kali Prasanna Singh, must be mentioned as a vigorous and clever, though occasionally coarse, painter of the manners of his countrymen. There are many more, too many perhaps for a country which has so recently emerged from semi-barbarism; but civilization, or a curious imitation of it, is a plant of fast growth in India, and all we can do is to hope that much that is worthless may die out, while what remains may be strengthened and pruned. That the Bengalis possess the power as well as the will to establish a national literature of a very sound and good character, cannot be denied, and it is to be hoped that the ponderous high-flown Sanskrit style will be laughed out of the field by Tekchând Thâkur and his light-armed troops, so that Bengalis may write as they talk, and improve their language, not by wholesale importations from the dead Sanskrit, but by adopting and adhering to one standard universal system of spelling, and by selecting from the copious stores of their local dialects such vigorous and expressive words as may best serve to express their thoughts. If the style of any one writer were taken as a model by the rest, a standard would soon be set up, and Bengali would become a literary language.

The immense activity of the Calcutta press should also be, if possible, a little slackened. It is impossible that more than one-tenth of the heaps of books which daily appear should be really worth the paper they are printed on. Less works and better ones, more care and thought, and less of the froth of empty heads, are wanted to produce a solid and enduring literature.¹

¹ For the majority of the facts contained in this paragraph on Bengali I must

Oṛiya literature begins with Upendro Bhanj, who was a brother of the Raja of Gumsar, a petty hill-state in the south of Orissa, which even to the present day is celebrated as the home of the purest form of the language. This voluminous poet composed a great number of religious works, many of which are still highly esteemed. His date is not exactly known, but he is supposed to have lived about three hundred years ago. I have a list of thirty of his productions, two of which are rhyming dictionaries, the Śabdāmālā and Gītābhidāno; the rest are episodes from the ancient Pauranic legends, erotic poems, and panegyrics on various gods. They are stated to be generally disfigured by gross indecency and childish quibblings about words, endless repetitions, and all sorts of far-fetched rhetorical puzzles. Dīnkrishno Dās, a poet of the same age, is the author of the *Rasakalloḷa*, the most celebrated poem in the language; the versification of which is its chief merit, being fluent and graceful; the subject-matter, however, is obscene, and contains very little that is new or original. There are also numerous paraphrases of well-known Sanskrit works, such as the *Bhagavadgita*, *Ramayana*, *Padma Purana*, and *Lachhmi Purana*.

A few lines are given from Dīnkrishno Dās's popular poem, the *Rasakalloḷa*, as a specimen of his style:—

छण कयारे जार खिह नाहिं ।
 काळ संघातकु देखइ सेहि ।
 काळ दण्डरे से घात होइब ।
 कष्ट संघातकु सेहि पाइब ।
 कहइ छण छणकु कथा ॥
 केबहि होइब नाहिं अन्यथा ॥ ३४ ॥

Rasak., iv., 34.

acknowledge my obligations to the article on Bengali Literature in the *Calcutta Review* for April, 1871.

"He who takes no pleasure in the story of Krishna, beholds Fate close at hand";¹ he shall be smitten with the punishments of Fate, a dreadful death he shall obtain, (Dīn)krishna relates the story of Krishna, —never shall it be otherwise."

In modern times a few prose works have been composed of considerable merit, but no originality, being either translations or adaptations from the English and Bengali. The Oriyas are beginning to wake up, but none of them have yet received sufficient cultivation to make them really good authors. Nor is there much demand for vernacular literature—the Oriya seldom reads, and not one man in a hundred can write his native language without falling into the grossest errors of spelling and grammar at every turn.

The Marathas have also a copious literature. Namdeva, the first poet, whose date is uncertain, but probably about 1290 A.D., drew his inspiration, as was the case with so many poets of his time, from the writings of *the early Vaishnava* reformers. Contemporary with him was the celebrated Dnyanoba or Dnyānadeva (ज्ञानदेव Gyāndeb, we should call him in the other provinces), who wrote a religious poem called Dnyāneshwari. Then follows a long string of more or less obscure poets, among whom Sridhar (A.D. 1571) deserves notice on account of his voluminous Pauranic paraphrases. Tukaram, the most celebrated Marathi author, was (A.D. 1609) a contemporary of the illustrious Sivaji. An admirably printed edition of Tukaram's poems has been produced at Bombay recently by two Pandits, Vishnu Parashuram Shastri and Shankar Pandurang. The poems are called Abhangas, or "unbroken"; probably from their being of indefinite length, and strung together in a loose flowing metre. Tukaram was a half-crazed devotee, such as we see so commonly in India, who began life as a petty shopkeeper, but being

¹ Literally, "the association of Yama," considered as Fate; *sanghat* in the second line is used in the sense of association, or propinquity; in the fourth, in that of killing or death. This verse is almost identical with the modern spoken language; *hoibo = hebo* is the only archaism.

unsuccessful, devoted himself to the worship of the idol Viṭhoba or Viṭthal, whose chief shrine is at Pandharpūr. At the temple of this idol at Dehu, near Puna, Tukaram spent the greater part of his life improvising these endless Abhangas, which were collected by his disciples. He eventually started off on a pilgrimage, and as he never returned, having probably died on the road, his followers chose to believe he had ascended to heaven. His doctrine is a reflexion of the Vaishnava creed, popularized in Bengal by Chaitanya a little before Tukaram's time; and the name of the idol Viṭhoba is a corruption of विष्णुप्रति, through the vulgar pronunciation *Bishtu* or *Bitṭhu*, common in Eastern India. There is nothing very original or striking in Tukaram's poems, which are very much like the ordinary run of religious verses in other Indian dialects. The following may be quoted as a specimen of his simplest style:—

दिव्या छवी घोडे । हे तों बर्यांत न पडे ॥ १ ॥

॥ धु^१ ॥ आतां येथें पंदरिराया । मज गोविसी कासया ॥ छ ॥

माज दंभ चेष्टा । हे तों शुकराची विष्टा ॥ २ ॥

तुका म्हणे देवा । माझे सोडववणे धांवा ॥ ३ ॥

“Torches, umbrellas, horses,—these are of no value, why now, O lord of Pandhari, dost thou entangle me in them? Honour, pomp, show,—these are mere pig's dung. Tuka says, O god, hasten to deliver me.”

It is, perhaps, unfair for a foreigner to give a judgment on such works as these, which certainly enjoy immense popularity in their own country, being “household words” to men of all classes.

After Tukoba, as he is familiarly called, the chief author is Mayur Pandit, or Moropant (A.D. 1720), who is by some considered as superior to Tukoba, and whose poems are highly esteemed. The Marathas have also a copious Anacreontic literature, which perhaps might better be called Rabelaisian without the wit, and with twice the amount of impurity.

¹ धुपद, or “Chorus”; it is repeated after each verse.

Of prose works this literature has but few and insignificant specimens. The chief are the Bakhars, or Chronicles of Kings, in which, as usual in India, so much that is legendary and impossible is mixed up with actual history as to detract greatly from their value to the student.

In modern times the English have introduced into this, as into all the other provinces of India which have fallen under their sway, a new spirit of learning and a new era of development. It remains to be seen how far this movement will remain an exotic, fostered by the ruling power, and unable to grow alone, and how far it will, as in Bengal, strike roots into the soil and bear fruit. Up to the present date the Marathas have not produced any original works in the new style. Of course the manufacture of endless religious poems goes on as usual, but this is not progress. Prose works of a solid and enduring nature seem as yet to have appeared only rarely and at long intervals. Newspapers, of course, there are, but the people seem to have been rather overdosed with translations and adaptations from English, executed by well-meaning but rather obtrusive officials and missionaries. It may be doubted whether any, or at least more than a small fraction, of these works are really suited to the popular comprehension.

We look in vain for spontaneous productions of the native mind, for works which seize hold on the national taste in the way that the old religious poems did, for works which do not betray the guiding and correcting hand of the English schoolmaster on every page. Until we get such works as these there will be no national literature.

Gujarati literature begins with Narsingh Mehta, who lived in the fifteenth century; the exact date of his birth is not known, but he was alive in 1457, and is considered the best poet in the language. His poems are chiefly short, something like sonnets, and of course religious. Some sixty poets are mentioned, but of these only ten or twelve are esteemed, as Vishnu Das, Shiv

Das, Samal Bhatt, and others. In modern times the Gujaratis, though rather a backward people as times go, have been stimulated into activity. There are a good many newspapers in the language, some of which, from the specimens I have seen, possess considerable merit, though others, again, are as bad as they can well be. Under English influence also, translations and original works have been produced, though it is stated that "a shelf of moderate dimensions would accommodate all the published prose works, translations included, which have yet been written by Hindu Gujarati authors."¹ Some societies are at work fostering native literary efforts, but not much is to be expected from them. The literature of a nation to be of any value must be a vigorous spontaneous growth, not a hot-house plant. Translations of goody-goody children's stories, or histories of India, dialogues on agriculture, Robinson Crusoe, and the like, though useful for schoolboys, do not form a national literature; no Tekchând Thâkur appears yet to have arisen in Gujarat. To show how little the language has changed since it was first put upon paper, I give a short piece from Narsingh Mehta, the earliest poet, and an extract from a modern Gujarati newspaper.

Narsingh's poem is as follows :—

પઢો રે પોપટ રજા રામ સતી સીતા પઢાવે ॥
 પાસે બંધાવી પાંજરું મુલે રામ જપાવે ॥
 પોપટ તારે કારણે લીલા વાંશ વઢાવું ॥
 તેનું ઘડાવું પોપટ પાંજરું હીરા રતને જઢાવું ॥
 પોપટ તારે કારણે શ્રી શ્રી રસોડ રંધાવું ॥
 શાકરના કરી ચૂરમાં ઉપરથી પીરસાવું ॥
 પાંચ પોલીને પગ પાંડુરા કોટે કંઠણો કાલો ॥
 નરસાઈ ના સ્વામીને ભજો રાગ તાળી રૂપાલો ॥ ૦ ॥

¹ Preface to Leckey's *Gujarati Grammar*, p. viii.

“Recite, O parrot, by leave of Ram, may Sita the virtuous teach thee,
Beside thee having built a cage, cause thee to mutter ‘Ram’ with
thy mouth.

Parrot, for thee I weave green bamboos ;
Of them I am making, parrot, a cage—I join jewels and diamonds.
Parrot, for thee what food shall I cook ?
On pieces of sugar I shall sprinkle ghee.
Thou of yellow wing, white foot, black neck,
Worship the lord of Narsai (Narsingh), trolling a pleasant song.”¹

From the *Gujarat Shâlâpatra*, for March, 1863 :—

आग नी गाडी

आग नी अथवा रेलवे नी गाडी चालवा लाग्याने पुरां पोहोणो सो
वरस पण थयां नथी. एटला मां तेनुं काम एटलुं बधु वधी गयुं के के
इंग्लांड ना घणा भागमां एज गाडीओ चाले के. एटली थोडी मुदत मां
ए गारीओ आ देश मां पण केटली एक जगाए चालवा लागी के. थोडा
वरस मां ज्यारे कलकताथी अहीं सुधीनी अथवा मुंबइ सुधीनी गाडी
यशे त्यारे आपण चण चार दिवसमां कलकते जइ शकिशुं.

“It is less than three quarters of a century since the Fire-carriage, or
railway, began to run. In this interval its use has been so extended that
these carriages now run in most parts of England. In this short time
these carriages have begun to run in several parts of this country also.
In a few years, when the trains run from Calcutta to this place or to
Bombay, we shall be able to go to Calcutta in three or four days.”²

Of the other languages it cannot be said in strictness that
they have any literature, if by that word we mean written
works. In most Aryan countries in India there has existed
from the earliest times a large body of unwritten poetry.
These ballads or rhapsodies are still sung by the Bhâts and
Chârans, two classes corresponding somewhat to our European
bards, and the antiquity of some of the ballads still current is
admitted to be great. The poems of Chand, to which I so
often refer, are nothing more than a collection of these ballads;

¹ Shapurji Edalji's *Gujarati Dictionary*, pref., p. xiv.

² *Ib.*, p. xix.

a collection probably made by the poet himself, when in his old age he bethought him of the gallant master whom he had so long served, and who had died in the flower of his manhood in that last sad battle before Delhi. Throughout all the country of the Rajputs, far down to the mouths of the Indus and the confines of Biluchistan, the Indian bards wandered singing, and a considerable quantity of their poems still lives in the mouths of the people, and has in these latter times been printed. This, as far as I know, is all that Sindh can show of ancient literature. And the case is not far different in the Panjab. In that province the language is still very closely connected with various forms of western Hindi. Though Nanak, the great religious reformer of the Panjab and founder of the Sikh creed, is generally pointed to as the earliest author in the language, yet few writings of his are extant, and in the great collection called the Granth, made by Arjun Mal, one of his disciples, in the sixteenth century, there is nothing distinctly Panjabi. It is stated to be for the most part an anthology culled from the writings of Hindi poets, such as Kabir, Namadev, and others, and consequently the language is pure old Hindi. It is to be observed that in all Western India there is a large number of ballads, snatches of songs, and other unwritten poetry current, which if it could be collected would form a considerable body of curious ancient literature. One circumstance, however, detracts much from the value of collections of this sort, namely, that the genuine old language, with its archaic or provincial expressions, is seldom to be found intact. The reciters of these poems habitually changed the words they recited, substituting for the ancient forms which they no longer understood modern words of similar meaning, so that we are continually being disappointed in our hope of picking up transitional fifteenth century phases of language which undoubtedly did exist in these poems in their original state. Even in written works this has taken place to

some extent. I am informed by Babu Rajendralal Mitra, a very high authority in such matters, that the printed editions of the Chaitanya Charanāmṛita, and similar early Bengali works now to be procured in Calcutta, have been so altered and modernized as no longer to present any trustworthy picture of the genuine language of the poem. I also notice that in some extracts from a pseudo-Chand printed recently in the Bengal Asiatic Society's Journal, the language is very much more modern than that of the authentic MSS. of the poem which I have seen. Thus, as an example, it may be noted that some twenty or thirty lines end with the word है "is." The real Chand never uses है; it had apparently not come into existence in his time. With him the substantive verb is almost always left to be inferred, and when expressed is generally indicated by the old Prakrit form होई¹ from भवति, whereas है is merely an inversion of आहि from अस्ति, through a form असइ; whence also the Marathi आहे. But the mischief is not confined to the substitution of modern synonyms for archaic words; often the archaic word not being understood, a current word of nearly similar sound has been substituted for it, thus altering the whole meaning of the sentence. Still, in spite of these drawbacks, there is much to be learnt from these rustic songs and plays, and good service has been done by the Rev. J. Robson, of Ajmer, in lithographing four or five of the Khyāls or plays which are frequently performed in Marwar. The Marwari dialect is faithfully represented in these interesting works, in which many a word of Chand is retained which it would perhaps be impossible to find elsewhere.

This rapid and imperfect sketch of the present available literature of our seven languages will show that religious poetry constituted the bulk, if not the whole, of it till the influence

¹ I have not read all through Chand, but I believe I have read as much as, or more of his poem than any living Englishman, and in all that I have read I have never yet come across है.

of European ideas began to be felt, and that since that time a copious literature has come into existence, of which much is mere ephemeral trash, obscene, pointless, and utterly contemptible, but which has already produced some few works worthy to live, and will doubtless in time produce more. Bengali is decidedly in advance of the others, next come Hindi and Marathi, then Gujarati and Oriya, last of all Panjabi and Sindhi; the former of which will probably not be cultivated as a literary language, being superseded by Hindi in its Arabicized form of Urdu.

§ 29. The extent of country over which each of these languages is spoken is so large, and there has been so little communication between one province and another until comparatively recent times, that it is not surprising that dialects should abound; indeed, I have often been disposed to wonder that there are not more. Hindi is spoken over 248,000 square miles. In its extreme eastern part, the district of Purâniya (Purneah), there is great confusion of speech. On the banks of the Mahanandâ river both Bengali and Hindi are spoken, and both equally badly. The Bengali of the Surjâpûr Pargana is quite unintelligible to a native of any other part of Bengal or Hindustan. In the central part of the district Bengali forms are very rarely heard; *dekhis*, *kahis*, for the pure Hindi *dekhâ*, *kahâ*; and *chhe*, "is," for *hai*, are the most marked peculiarities. Crossing the Kusi river, and going westwards, we come into the region of Mithila, the modern Tirhut, where the language is purely Hindi in type, though in many of its phonetic details it leans towards Bengali. On the south side of the Ganges, in *Bhagalpur*, Munger (Monghyr), and Gayâ, the dialect is called Magadh, from the old name of the country. Adjoining the Maithil and Magadh, and stretching from the Himalayas to the outlying spurs of the Vindhya, is the Bhojpuri dialect, so strongly marked with features of striking individuality as to be almost

worthy to be called a separate language, and retaining many fine old Aryan forms which have dropped out of classical Hindi.¹

When we get beyond the Bhojpuri area, about Benares, we come into Central Hindustan, and from Benares to Delhi the dialectic differences are not so very great as to call for special remark. It is true that there are many diversities in the words, and occasionally also in the inflectional forms used in various parts of this wide tract, but there is no very striking divergence from the central type. To the south, however, in the vast regions of Rajputana, strongly marked dialectic peculiarities again meet us, and there is a large number of provincial forms of speech. The Marwari, which I have alluded to before, merges gradually into Gujarati, which is conterminous with it on the south, in such forms as the infinitive in वो (रववो = रहना H., but रेहवो G.), and the form of the future in सी, as होसी "shall be," G. होशे (भविष्यति). It still retains the ancient genitive signs री, री, रे, and many other distinctive marks. Some of the Rajput dialects again exhibit a tendency to approach to Marathi, and others more to the west modulate gradually into Panjabi and Sindhi.

Panjabi is spoken halfway through the country between the Satlaj and Jamná. It is impossible to say where it begins. In those regions it is generally observable that if you address a man in Hindi, he answers you in Panjabi, and *vice versa*, both languages being spoken with equal fluency and equal incorrectness, just as an Alsatian speaks French and German, both equally badly. Throughout the Panjab and Sindh the most important tribe in point of numbers is that of the Jats, who under the name of Jāts also spread far into Rajputana and the Doab. Panjabi, Sindhi, and Western Hindi, regarded as the mother-tongue of this great race, appear to us as almost one

¹ I have contributed a sketch of this dialect to the Royal Asiatic Society. It will be found in vol. iii. (new series), p. 483, of their *Journal*.

language, with a regular series of modifications extending in waves from the Persian Gulf, up the Indus, across the five rivers, and far on into the deserts of the Rajputs. Thus, the present participle in Hindi ends in *tā*, in Eastern Panjabi this is softened to *dā*, with an *n* inserted when the root ends with a vowel, thus *kardā*, "doing," but *khāndā*, "eating." As we get further into the country going westwards and southwards about Shahpūr and Jhang, we find this *n* always used, even after bases ending in a consonant; thus, *mārendā*, "beating." When, however, we get right down into Sindh, the form in *ndā* has become the regular classical termination in universal use, and is fortified by a long vowel; thus, *mārindo*, "beating," which takes us back to the Prakrit *marento* and Sanskrit *mārayant*.¹

There are so many dialects in Panjabi that it is impossible to enumerate them. In every district, nay, in every parganah, a difference is perceptible; and on arriving in a new station, the English official almost always finds himself confronted with a new local "boli," by which term I mean to imply a distinction something less than that conveyed by the word "dialect."² The general features are the same throughout; but there is a twang, a dozen or so of inflections, several scores of words, quite peculiar to that one place, and not understood out of it. In fact, in all the parts of India with which I am personally acquainted I have noticed something of the same peculiarity, namely, that the words which the peasant uses to express the objects around him, the different descriptions of cattle, tools, seeds, grasses, crops, diseases of crops, grain in various stages,

¹ Conclusively proving that the form of the present tense in Hindi is not derived from that of the agent in Sanskrit, as some say; though H. *kartā*, "doing," is the same word in form as Skr. *kartā*, "a doer," yet it is derived from a Prakrit form *karanto* (Skr. *kurvan*).

² We lack in English a word to express this sort of distinction. The Germans have a useful word, "mundart," which exactly conveys the idea I wish to express in the text.

soils, waters, weathers, and the like, differ in every district I go to. Going from Gujrat to Jhelam, and from Jhelam to Rawal Pindi, the whole of the ryot's surroundings change their names completely twice over. Perhaps the only exception is the plough, which I only know by two names,—*hal* in Upper India, and *nāngal* in Bengal and Orissa. The cow may be perhaps cited as another exception, and in truth *gau* and *gai* would perhaps be understood in most places, and the generic term *goru* for cattle in a good many—but the peasant is not content with this. His cow is red, or dun, or grey, or white, or fertile, or barren, or has had one calf or two, or is milch or dry, or has its horns bent forwards or backwards, or straight, or of uneven length, and each of these peculiarities has a name, and that name is used, to the exclusion of the generic term “cow,” and differs in every district; so that to the superficial observer, or perhaps even to a careful student who judged from this class of words, there would at first sight appear to be more dialects in the language than there really are. Still, after making all due allowance for these peculiarities, I am of opinion that, owing to the absence of any written standard, our brave Panjabi peasants possess a number of *bonâ fide* dialects which is considerably in excess of that possessed by most languages spoken over an equal area of level country in any other part of India.

Sindhi, according to Trumpp, has three dialects,—Sirai, spoken in Siro, or the north of Sindh; Vicholâi, in Vicholo, the middle part of the country; and Lari, in the southern districts along the sea-coast. But it is evident from an examination of the published grammars that this threefold division does not exhaust the variations of the language. Perhaps it would be more strictly correct to say that the numerous dialects fall into three groups. It is impossible that in the whole of Lar only one uniform speech should prevail. We know, for instance, that in the eastern part of that pro-

vince, towards Thar and Parkar and about the Rinn, the dialect called Kachhi begins to be heard. This dialect I am uncertain whether to class with Gujarati or Sindhi; as similarly the Uch dialect, on the north of Siro, is by some considered a dialect of Panjabi, by others of Sindhi. Thus the various cognate languages of Aryan India melt into one another so imperceptibly that it is a question of much difficulty how to define their limits. But it is not only with regard to border dialects that there exists a difficulty. In the heart of each province the same local variations exist. When we are told that "there" is expressed in Sindhi by ताड़ई, ताड़उं, ताड़ऊं, ताड़ओ, ताड़हं, ताड़हउं; ताड़हीं, ताड़ऊं, ताड़हीं, ताड़ा, ताड़ाहउं, ताड़ाहीं, ताड़ाहं, and ताड़ाहीं, and that these forms mean also "thence," what are we to understand? Is it meant that the Sindhis in all parts of Sindh use all these thirteen forms indifferently, or that the pronunciation of the language is so indistinct that in consequence of its being for the most part unwritten a foreign dictionary-maker finds it impossible to decide on the exact way of writing the word? or, thirdly, has he grouped together a whole mass of variants drawn from different parts of the country? If we consider the matter a little, it will appear improbable that so great a variety of forms should be used in one town or district without any distinction of meaning, and the abundant diacritical marks which have been invented to express slight shades of modulation in sounds, forbid the supposition that the author was baffled by the indistinct utterances of the people. The third supposition, then, forces itself on us as the true one, and the more so when we see that so indispensable and hourly-recurring a word as "I" exhibits the same redundancy of forms, being written आ, आँ, and माँ; of the last form we are indeed told expressly that it is peculiar to Shikarpûr, in Northern Sindh. "Ye" is written तह्नीं, तहीं, अह्नीं, अहीं, अह्नें, आँई and आँई. Many other pronouns and common inflections have also the same multiform

character. Judging also from my experience of the Panjab, I should think it almost certain that every ten miles in Sindh a new dialect or sub-dialect would be met with.

Proceeding onward into Gujarat to the south-east, and leaving the transitional Kachhi to be affiliated either to Sindhi or Gujarati, or half to one, and half to the other, as may be finally decided when more is known about it, the same confusion, or rather multiplicity of shades, is found to exist. "In the north-western parts of Kathiâwâr it is to some extent modified by Sindhi. As we pass to the north and north-east of Gujarat, it merges into Vraj, or Marwâri, and Hindi. Analogous modifications occur on the eastern side of Gujarat. On the south a sharper boundary appears to separate it from Marathi. In the centre of Gujarat a broad accentuation of some vowels prevails. In Southern Gujarat inequalities in orthography and in the sounds of some letters, with an influx of Persian vocables, has resulted from the residence of the Parsis there. In Northern Gujarat there is perceptibly a peculiarity in some sounds, such as the च in the imperative mood. The speech of Vânyas, Brahmans, aboriginal tribes, etc., is marked by some peculiarities. The province of Kachh has a dialect, sometimes reckoned a distinct language; yet Gujarati is there generally understood. Thus the general hue of the language shades off, in different parts of its field. I have heard natives lay it down as a maxim, that in every twelve *kos* there is a variation."¹ In conformity with the saying mentioned in the last sentence, there is a Gujarati proverb, बार गाउए बोली बदले तरवर बदले साखा, "Every twelve *kos* the language changes as the branches differ on trees."

Gujarati does not, however, shade off into Marathi in the

¹ Introduction to Shapurji Edalji's *Dict. Dissertation on Gujarati*, by Dr. Glasgow, p. x. I have taken the liberty of correcting the writer's grammar in one or two instances.

same imperceptible way as it does into other languages. On the contrary, a native author states, "The Gujarati language agrees very closely with the languages of the countries lying to the north of it, because the Gujarati people came from the north. If a native of Delhi, Ajmer, Mârwar, Mewâr, Jaypûr, etc., comes into Gujarât, the Gujarati people find no difficulty in understanding his language. But it is very wonderful that when people from countries bordering Gujarat on the south, as the Konkan, Maharashtra, etc., come to Gujarat, the Gujarati people do not in the least comprehend what they say; only those words which have been imported from the north are intelligible to them."¹

And yet the Marathas too must have come from the north, just as the Gujaratis did. What the author probably means is that the inflectional system of Marathi differs so widely from that of its cognate languages, and especially so from Hindi, as to be quite unintelligible to the simple Gujarati peasants, to whose minds the idea of one common Aryan stock is not so constantly present as it is to the scholar, and who, therefore, are not always on the look out for resemblances. This is not to be wondered at when we reflect that even in our own country people may be met with who have learnt the German language, and know it well, without having been once struck by its similarity to their own.²

Gujarati is also largely used beyond its own area in the city of Bombay as a mercantile language, though in this position, as might be expected, it is largely mixed up with foreign words, and its grammar has become very corrupt. It is used by the following classes of persons :

¹ गुजराती भाषानो इतिहास, or, *History of the Gujarati Language*, by Shastri Vrajlal Kalidas, p. 50 (lithographed, Ahmadabad, 1866).

² I met a remarkable, and in other respects intelligent, person once who not only had not noticed the similarity of the two languages, but refused even to admit it when pointed out to him. It is to be feared there are many such.

1. Musulmans from Kachh, among whom are the Mihmâns and Khwâjas (*vulgo* Khojas), well-known traders; the latter of whom are met with in trading towns all over Northern India, where, however, they speak Urdu.

2. Wohorâs (*vulgo* Boras), another class of traders.

3. A few Maratha Musulmans from the Konkan.

4. The various castes of Gujaratis, Brahmans, Vânyas (Banias), Rajputs, etc.

5. Seths and Bhâtîâs, Hindu merchants and bankers from Kachh.

6. Mârwarîs.

7. A few Hindu Marathas from the Konkan.

8. Parsis.¹

In this fact we see another instance, like that of Hindustani, in which the simpler language prevails as a *lingua franca* over the more complicated. Nothing tends to restrict the use and currency of a language so much as an intricate grammatical construction, while nothing conduces to its wide-spread popularity so much as absence of inflectional forms, gender, case, and the like. The language spoken by the greatest number of human beings at the present day, the English, is also that which is least encumbered with grammar of any sort.

Marathi has undoubtedly, as I have before remarked, a very decided individuality, a type quite its own, arising from its comparative isolation for so many centuries. The Vindhya range of hills, during those times when India was split up into many petty kingdoms, must have acted as an effectual barrier to communication with the other Aryan nations. For all that, however, it has close links with Gujarati, though the Gujaratis fail to perceive them.

The two great divisions into which Marathi falls are called Konkani and Dakhani; the former spoken in the long narrow

¹ For the above facts I have to thank Mr. Flynn, of the Bombay High Court.

strip of country between the mountains and the sea, the latter in the high table-land of the Dakhan, or south of India as the northern Aryans called it, Central India as we ubiquitous English more truly designate it. From the circumstance of my personal experience being confined to Northern and Eastern India, I have less data for Marathi than any other of the languages; a circumstance the more to be regretted as Marathi is a very leading member of the group. As far as I can learn from books and private information, the dialectic distribution of the language is somewhat on this wise:

The dialect of the district lying round Puna seems to be considered the most correct form of the language, as it is generally called Deshi, or the language of "the country" *par excellence*. The Konkani dialect differs not very strikingly from the Deshi, and some of its forms are considered as more in harmony with the general analogy of the language than those in use in the Dakhan. The Konkani peculiarities resemble in a few important particulars those of the Bengali, and in both cases there is reason to suspect that their proximity to the sea and the low swampy nature of the country may have had a tendency to thicken and debase the pronunciation. Thus, it is said that the anuswâra is more clearly heard in the Konkani than in the Dakhan; just as it plays a more prominent part in Bengali than in Hindi; the former prefers long *a* to short, अ to स, ए to न, and retains a final स in some terminations where the latter rejects it. All these are points in which the Bengali differs in precisely the same way from Hindi.

The city of Rajapur and its neighbourhood offers several divergences from both the principal types, and the same is observable in the small territory of Wâdi. In the southern part of the Dakhan, about Sattara, the language again changes, and forms which resemble both those in use in the Dakhan and those of the Konkani are used convertibly. In Kolhapur there is much Canarese (Karnâṭaka) spoken, and the Marathi of the

neighbourhood naturally becomes impure and incorrect from the admixture of this foreign idiom. The native Christians in this part of the country also mix up much corrupt Portuguese with Marathi. In addition to these disturbing elements, the wandering predatory tribes of the Ramusis, Mangs, Bagwans, and others use a patois of their own; some of the words which are quoted by my authority¹ are semi-Dravidian, and others seem to be mere gibberish. Of the former class are उरु "a village," Dravidian *ūr*; नीडल "water," Dravidian *nīru*; though this latter word is also claimed as Aryan. Of the latter are कीवंजा "eye," ऊकन "come here," and the like.

Passing from the Marathas to their ancient victims the Oriyas, a much more homogeneous language is found. In the north of Orissa, about the Subarnarekhâ river and along the Hijli coast, and even to within a short distance of Midnapur (Médinipur), a corrupt form of Oriya is spoken, mixed with an equally corrupt form of Bengali. Even in this region, however, many among the peasants are found who speak pure Oriya, and others who speak fairly good Bengali. The position is parallel to that which I have noticed as existing in Ludiana and Amballa, where Hindi and Panjabi are mixed up, so that one is never sure in which of the two languages to address any man. From the Subarnarekhâ all down the coast to Puri the ordinary Oriya is spoken with hardly any perceptible differences. The people of the hill-states, however, speak with a clear distinct utterance which contrasts pleasingly with the low muttering and indistinct articulation of the residents of the plains. It is said by the Oriyas themselves that the language is spoken in its greatest purity in the hill-state of Gumsar, the birthplace of the first national poet, Upendra Bhanj. As, however, Gumsar is very far to the south, closely adjoining areas peopled by Dravidians and Kols, this assertion seems rather doubtful. I notice no difference between the speech of those who live in

¹ "Report on Kolhapur," by Major Graham. *Bombay Records*, No. viii., new series.

Balasore and those who come from the extreme south of Puri or Cuttack; nor do the natives of the province seem able to point out any such differences, though the Balasore people say that they of Cuttack and Puri laugh at them as imperfect speakers. This may arise from the extraordinary and altogether unparalleled slovenliness of utterance in vogue here. A native of Balasore will not open his mouth or speak clearly and distinctly; a dull hoarse rumbling is all he is capable of. Some few Bengali forms have been naturalized here, as, for instance, *kiso* = "what," for *keṇo* or *koṇo*; *korite hebo* = "it must be done," for *koribāku hebo*, where the real Oriya form is so much longer and more unwieldy than the Bengali, that the people have readily thrown it aside for the shorter and simpler expression.

Finally, with regard to Bengal itself, there is much difficulty in making any accurate statement. The crowd of dialéctic forms which occurs on all sides is absolutely bewildering. It may be said that, apart from the Calcutta standard of the language in use among educated persons, there exists among the peasantry of the various parts of the province no common standard at all. A peasant of Tipperah or Sylhet would probably be quite as unintelligible to a resident of Murshidabad as he would to a Maratha or a Sindhi. The language commonly spoken in Central Bengal or Rârh (राढ़ *i.e.* राढ़) may be taken as the truest type, and the rest may be classed under the general heads of Eastern, Northern, and Southern Bengali. The former of these is spoken over a wide area, and as we saw in Gujarat, so also here, every twelve *kos* a difference is noticeable. The principal feature is the substitution of *h* for *s* and of *s* for *chh*. Thus, *suniyāchhi*, "I heard," becomes *hunisi*. In Northern Bengal corruptions just as great, though of a different kind, occur, and the same may be said of Southern Bengal. No one, however, has yet taken the trouble to make a collection of the local forms in use in the various districts,

and till this is done all that can be said is, that very numerous divergences exist, and several striking local peculiarities are known to be current, concerning which we await further information. Even in Calcutta till quite recent times people spoke in twenty different ways, and no one was sure which was the correct way.

On reviewing the whole question of Indian dialects, several important points attract attention. The first is, that as each of the seven languages, except Oṛiya, possesses many dialects, and as none of them until recent times and the rise of literature had any central type or standard, each one of the dialects into which it is divided has as much right as any of the others to be considered a genuine Aryan form of speech, and any one of them might have been chosen, as one of them actually was, as the basis on which to found the central type. Further, as some of the dialects spoken on the frontier between two languages partake almost equally of the characteristics of both, so that the various languages melt gradually one into another, without any of that harshness or confusion which marks those countries where two heterogeneous languages come into contact, we are justified in pointing to a time when there was no such distinct demarcation between the various languages as we see at present. We thus can raise for ourselves a picture of a bygone age, in which all the Aryans of India spoke what may be fairly called one language, though in many diverse forms, *πολλῶν ὁνομάτων μορφῇ μία*; and can see that the so-called seven languages of modern India have arisen from a process of crystallization, so to speak, the atoms consisting of the various dialects having been attracted to and grouped themselves round seven principal points or heads. The intrinsic and essential unity of the whole Aryan family in India thus becomes a natural result of the researches of philology, as it does of those of history.

Secondly, inasmuch as until the rise of literature no one of

these numerous dialects had the pre-eminence over any of the others, we must not be contented with taking for the basis of our researches or arguments merely such words and forms as are to be found in the literary dialect of each language, because every one of the spoken dialects is presumably of equal antiquity and equal authority with the one written dialect. There is thus a most important and most valuable task waiting for hands to perform it. In every part of Aryan India there are now highly-educated English officials, who take a real and earnest interest in the people over whom they rule; it would be an easy and to many, it is hoped, a pleasing task to collect the words and forms current in their neighbourhood. The pages of the *Journal* of the Asiatic Society of Bengal are always open to contributions of this kind, and have already received many such; but many more remain to be done: will not those who can save these rare and curious words from perishing rouse themselves to do so ere it be too late? Before the spread of education local dialects are already beginning to die out, and will doubtless disappear more and more rapidly as time goes on, taking with them into an oblivion whence they cannot be recovered, words which might throw invaluable light upon dark places in the history of the development of the language to which they belong.

§ 30. The whole of these languages, including all their varied dialectic forms, exhibit at every turn marks of a common origin, and the changes and developments—I cannot call them corruptions—which they have undergone are all in the same direction, though in different degrees. There is hardly any special peculiarity in any one of them of which traces may not be found in a greater or less degree in all or most of the others. As regards mutual intelligibility, which has been proposed as the test whereby to distinguish languages from dialects, there is much divergence. An Oriya can generally understand what

is said to him in Bengali, and many Bengalis, for political purposes, insist upon regarding Oriya as merely a dialect of their language. A Bengali peasant from the south of Bengal would understand much, if not all, that was spoken in Oriya, but a native of Northern or Eastern Bengal would not. Again, in Purneah, on the frontier between Bengal and Hindustan, the two peoples did not appear to understand each other readily; though they managed to communicate with each other, it was more because every man spoke both languages, and was quite aware that they were two distinct languages: indeed, the difference between the two was better appreciated than the similarity, as is often the case on such linguistic frontiers.

Panjabis for the most part understand Hindi readily, and very quickly learn to speak it correctly, abandoning the peculiarities of their own language as mere dialectic vagaries. The Hindustanis, from their superior cultivation, take high tone with the simple Panjabis, and laugh them out of their pronunciation and local forms, insisting, as do certain Bengalis with regard to Orissa, that these latter are mere vulgarisms, to be shunned by correct speakers. Of course in the wilder parts of the Panjab Hindi is not well understood, and in the very wildest not at all.

With regard to Sindhi, the reverse is the case; while it is fairly intelligible to the wild wandering Jat and Gujar tribes of the desert, and to the southern Panjabis generally, it is quite unintelligible to the more settled and cultivated population. I have known a Sindhi come to my court at Gujrat, in the northern part of the Chaj Doab, lying between the Chenab and Jhelam rivers, and not a single person could make out what he said; we even sent for a man celebrated for his knowledge of Panjabi and its dialects, but he could do no more than tell us that the language the stranger spoke was Sindhi, he could not understand it; and I strongly suspected at the time that he

only found this out from the word "Sindhi" which the man uttered repeatedly.

Sindhi is stated to be intelligible to natives of Gujarat, and in Kachh both languages are spoken. I have already quoted a remark from a native of Gujrat as to the difficulty his countrymen experience in understanding Marathas. In Southern Rajputana the three languages, Hindi as well as the two last mentioned, are mixed up; even there, however, Marathi is regarded as a distinct and only partly intelligible language.

Oriya is separated from Marathi by a long tract of wild hilly country, peopled by non-Aryan races. For fifty years, however, Orissa was under the sway of the Bhonslas of Nagpur, and even after seventy years of British rule the country still bears traces of their rapacity and oppression.¹ From all that I can learn of the traditions of those times, the two peoples found no difficulty in communicating with one another. Of course the Oriyas had to learn the language of their conquerors, and a few Marathi words have thus passed into their language; in the present day, however, they are widely sundered, and it is probable that if they came into contact, they would find it quite impossible to carry on any sustained conversation.

Although somewhat has been already said about the dates of the earliest written works in the modern languages, yet it is advisable, in order to make the general review of this group of languages more complete, to discuss the question of their chronological sequence more at large. In working out problems of Indian etymology, sufficient attention is not paid to the historical elements of the calculation. Especially is this

¹ It must be mentioned, however, in fairness to the Bhonslas, that they were very active in public works. Their tanks, roads, bridges, and dykes are still in existence, and were constructed on a princely scale, though, as they were not hampered with any scruples about paying their work-people, it was as easy for them to execute lordly designs as it is for the Khedive of Egypt in the present day. This little point should be remembered by those who reproach the English for the inferiority of their public works. Whatever we do is *paid for*.

the case in the works of European scholars, who, being generally better versed in Sanskrit than in the modern languages, are apt to attribute too much influence to the former and to write as if they thought that it was still a living and well-known tongue. Now without going into the question of how long Sanskrit remained a spoken language, it may be assumed as a fact, accepted by most scholars, that it certainly ceased to be a vernacular in the sixth century B.C., and remained as the language of religion and literature only. From that time the Aryan people of India spoke popular dialects called Prakrits. It is from these latter therefore, and not directly from Sanskrit, that the modern languages derive the most ancient and distinctly national and genuine portion of their words and grammatical inflections.¹

The point which concerns us more particularly is not the rise and fall of either Sanskrit or the Prakrits, but that of the rise of the modern Indian vernaculars. It may be as well here to repeat that the presence in any language of words in their pure Sanskrit form is not a proof that those words have remained in that language from the beginning and come down the stream of time unchanged; some few words may have done so, but they are very few. On the contrary, a pure Sanskrit or Tatsama word is almost certainly one which has been introduced into the language in modern times by learned men. When did the modern languages cease to be Prakrits, and assume something like their present form? which of them first definitely assumed that shape which, with few modifications, has lasted to the present day? To answer these most interesting questions it will be necessary first to ascertain what stages of speech are ancient and what modern, to state which is that particular point of development which may be considered

¹ Those who wish to see the whole argument clearly drawn out and explained in a lucid and readable form are recommended to refer to the second volume of Dr. Muir's *Sanskrit Texts*, than which nothing can well be more full and complete.

homogeneous with all subsequent stages, and heterogeneous as regards all past stages. A few illustrations from modern European tongues will help in this inquiry.

The Romance languages, Italian, Spanish, French, Provençal, Portuguese, and others, are derived principally from the Latin by the process of gradually wearing away and confusing the terminations of verbs and nouns till they no longer sufficed to distinguish cases and tenses. Then by degrees additional words had to be introduced to mark these distinctions, and thus grew up the modern analytical method of construction. In Latin, *mons, montis, monti, montem, monte*, are words in which the original idea *mons* = *mountain* is modified by the terminations *s* (for *ts*), *i*, *is*, *um*, *e*. in such a way that they suffice of themselves to indicate the relation which the idea involved in the word bears to the rest of the sentence. To make this idea clearer it had become customary in Latin to prefix certain particles, called prepositions, to the noun in those cases where the verb or noun which had relation to the idea of the object did not express the action sufficiently by itself. Thus, in *video montem*, "I see the mountain," the verb *video* suffices to express fully the action which takes place; but in *eo ad montem*, "I go to the mountain," the verb "I go" does not so suffice. A man may go up a mountain, or down it, to it, from it, or round it; hence the preposition is necessary to show what sort of going is intended with reference to the mountain; *ad, trans, circum*, = *to, across, round*, all modify the primary idea in different ways. In the prime and noonday of Roman speech the synthetical sentiment, or tendency to *put together* leading words and their subsidiary particles, was so strong that it was customary to prefix the preposition to the verb, and incorporate it with it; accordingly they said *adeo, transeo, circumeo montem*, in preference to *eo, ad, etc.* In Sanskrit this tendency is so powerful that the prepositions are almost always used in this way, and so also to a great extent in Greek. In later times, however, all

the terminations noted above became abraded, and for all of them, including even the nominative, the one form *monte* was substituted in Italian. Then came in the more extended use of the prepositions, which were now necessary in every case to distinguish the relation, and the noun was modified accordingly, *del monte* (*de illo monte*), *al monte* (*ad illum montem*), *sul monte* (*super illum montem*), *dal monte* (*de ab illo monte*), and so on. This process did not of course take place all at once. The first step was to confuse the Latin terminations. A Roman of the time of Augustus would say *ad montem* with the accusative, but *a monte* with the ablative, case. His descendants in the fifth century have left behind charters and other documents in which *ab montem*, *ad die*, and the like occur.¹ In the case of verbs also the distinctive tense endings being confused and worn away, a more constant use of the personal pronoun became necessary, as well as a recourse to the verbs *to have* and *to be*, in order to make the exact meaning clear and unmistakable. Without wasting more time on these well-known matters, it will be seen that synthesis, or putting together, is the keynote of the ancient languages, as analysis, or dissolving, is of the moderns. When, therefore, we get to that point in the development of languages where the analytical system is fairly established and in full working order, and whence all traces of synthesis have either disappeared or become subordinate and casual instead of universal and regular, we may take that point as the commencement of the modern language. Thus, though the language of Ælfred is our true old English speech, yet it is ancient English still very largely synthetical. Modern English strictly speaking begins about 1265, when the Normans had become thoroughly amalgamated with the Saxons and Angles,

¹ "Ab hodiernum die, absque ullo dolo aut vim, ad die presente, ante valneo et orto (balneum et hortum) contra hoste barbaro, cum omnes res ad se pertinentes," are a few more instances which I take from no more recondite source than Lewis's *Romance Languages*, who quotes them from Raynouard.

and ceased to use their own French as a language apart from the Low-Dutch of the masses. Modern French begins a little earlier, about the end of the tenth century, when the rise of the dynasty of Hugh Capet, himself ignorant of Latin, and the extinction of the Frankish Karlings with their Teutonic speech, led to the general use of the Romance Langue d'oïl, even among the higher classes.¹ If we now turn to the parallel group of languages which in distant India was developing itself at the same time and under the impulse of precisely the same instincts as those which prevailed in Europe, we shall find the coincidence in point of time fairly maintained.

Chand, the earliest writer, though he mangles his words with more than poetic licence, may still be adduced as the best evidence we have of the state of the language in his own times, the end of the twelfth and beginning of the thirteenth century. Chand's poems are in the same stage of linguistic development as those of his contemporaries, the trovatori, troubadours, and trouvères of Europe. The old synthetical structure has been broken up and thrown into confusion, but not quite lost, while the modern auxiliary verbs and prepositions are hardly fully established in their stead. This gives an air of great confusion to the language, especially in the Indian poet, who is particularly fond of stringing together long lines of words without inflections of any sort, and leaving the reader to find out what relation they bear to each other.

Thus, in the second line of the poem occurs the phrase,

तम गुण तिष्ठति इस दुष्ट दहनं

literally, "Wickedness quality stands lord wicked burning." Here the pure Sanskrit तिष्ठति which the poet has dragged in to show his learning, is the only inflected word in the sentence, and the reader may supply the connecting links as he pleases.

¹ Modern High-Dutch, or, as we call it, German, is of much later birth, but we cannot here enter into this question.

Probably the poet means, "The quality of wickedness stands (*i.e.* is put a stop to) by the lord burning up the wicked."

Again,

पति वसंतमासे ॥
 कोकिलं झंकार अम्ब वन करयं ॥
 बर बंबू रति रष्यं ॥¹
 कपोतयं नैव कलयति ॥

Here the poet is perhaps under the impression that he is writing Sanskrit, of his knowledge of which he has been boasting a few lines before; and he certainly has collected a good number of Sanskrit inflections; thus, the first line, "When the month of spring falls (*i.e.* ceases)," is pure Sanskrit, but the next line is nothing, neither Sanskrit, Prakrit, nor Hindi, "The koil chirping mango forest make (or making)," कोकिलं may be either singular or plural for all the indication given by its form; and as to करयं, beyond the fact that it is connected evidently with the root कर "to make," nothing can be predicated of it one way or the other. The third line means, "Sheltered from the sun by the bamboos"; बर may be a hundred things, probably here it is put in, as it is in so many other places, merely to complete the metre, and may be vaguely translated "good" or "best." We must not try to get too accurate a meaning out of lines which were never meant to be subjected to the microscope of science. रष्यं is like करयं, and conveys a general idea of being preserved or sheltered. In the fourth line कपोतयं perhaps, dropping the य, which is stuck in to eke out the line, shows us the transition from the Sanskrit neuter ending आनि, which gradually superseded all other terminations, to the universal Hindi plural termination अन and अनि for all genders, the nasal being here written as anuswâra. The concluding words of the line again are pure

¹ *i.e.* rakham, ष = ख always in MSS.

Sanskrit. This use, however, of Sanskrit inflections is confined to the introductory rhapsodies; in the historical portion of the poem such forms occur very rarely, if at all. But throughout the long poem there is very little sense of the exact meaning of Sanskrit or Prakrit verbal forms; those few forms that are used are purely modern. They are distinctly Hindi, not Prakrit. The present is expressed by the participle, as रेहत "streaking," सोभत "shining," etc. The past tense is not a corruption of a Prakrit form of any of the Sanskrit preterites, but the past participle; भयी m., भई f., भए pl. m., भई pl. f., "was," लग्यौ or लग्यौ "stuck," and others. The most frequent method of expressing a verb, however, is to put the indefinite participle in इ for all tenses and moods indiscriminately, सुनि राई दान मंडौ अपार "Having heard it, the king prepared inestimable gifts."

The future has not yet quite fixed itself, and is often expressed by the indefinite present of later times; as जैसे ध्याए ऐसे पाए "As he shall think, so he shall obtain," i.e. "Whatever he shall wish for he shall have." Postpositions are occasionally used to indicate cases of nouns, though their use was apparently not quite settled, as they are sometimes used as true case-signs, and sometimes as prepositions governing the case. Of the first-named usage, which is chronologically the last, the following are examples:

सहस्र घट्ट सिव उपर कीने ॥

They poured a thousand water-pots upon Siva.

देखति नृपति बसि नींदा माही ॥

Seeing the king sitting in sleep.

सब नारिन की सोच उपनी ॥

To all the women fear arose.

राइ राजन संग हिंडे ॥

The king travels *with* kings.

ताके कुल ते उप्पनी ॥

There sprung *from* his family.

Of the second, which is chronologically the earlier of the two, the instances are much more rare, and are chiefly confined to such phrases as ताके माहीं “in (the midst) of it,” and the like.

It is evident from an examination of the poem that the Hindi language, regarded as a modern and analytical form of speech, had just begun to be formed, and was in its first infancy; perhaps in about the second or third generation previous to Chand it had been still mainly synthetical.

We may therefore fix upon the eleventh century, or about one hundred years before Chand, as the epoch of the rise of Hindi, or the principal modern language of the group. At the same time with Hindi, Gujarati and Panjabi, neither of which were yet separated from it, took their rise.

Turning next to the eastern languages, Bengali and Oriya, there exists in the present day an active controversy between the literary heads of the two provinces. The Bengalis assert that Oriya is merely a dialect of Bengali, and has no claim to be considered an independent language, and they mix up with this assertion a second to the effect that if it is not it ought to be, mainly because they wish it was, and secondarily because the population of Orissa is so small as compared with that of Bengal that they think it useless to keep up a separate language and written character for so small a province. They further urge that the maintenance of a separate language prevents the Oriyas from learning Bengali and profiting by the vast stores of valuable literature which they consider the latter to contain. Much of this chain of arguments is purely

political, and may therefore be very briefly dismissed by the following remarks. If Oriya is to be suppressed because it is only spoken by a few millions of people, it might also be urged that Dutch, or Danish, or Portuguese, should be obliterated also. Basque should also be stamped out, and the same argument would apply to Romaic or Modern Greek, and would justify the Russians in trying to eradicate Polish or the Austrians in annihilating Czech. But when the case of Oriya comes to be considered, it must be remembered that it is spoken not only by five millions in the settled and civilized districts of the sea-coast, but by an uncounted and widely dispersed mass of wild tribes in the vast tract of mountains which covers hundreds of miles inland, and extends as far west as Nagpore and as far south as Telingana. In these regions it is rapidly supplanting the old non-Aryan dialects; and from its having absorbed into itself much of the non-Aryan element, it affords a far better medium of civilization than Bengali. Moreover, it is far beyond the power of the handful of English and Bengalis settled in Orissa to stamp out the mother-tongue of all these millions, and it may be added that any forcible measures of repression would be entirely foreign and repugnant to the spirit of our policy. The result of teaching Bengali in our schools, to the exclusion of the local vernacular, would only be that the small proportion of Oriya boys who attend those schools would know the former in addition to the latter, that they would learn to despise their mother-tongue, and that a gap would be created between the mass of the peasantry and the small body of educated persons. This result is just what the Bengali would consider proper: from the earliest times in India there has been a chasm, studiously kept open and widened by every effort, between the higher and educated classes and the lower and uneducated,—“this people that knoweth not the law is accursed.” Bengalis would like to maintain this, because it throws all influence into their hands, and delivers the

wretched peasant, bound hand and foot by the chains of ignorance, into the power of his oppressors. If we wish to see this huge seething mass of ignorance, vice, and superstition permeated by the light of truth and knowledge, we are bound to fight tooth and nail against the Bengali theory, and, by upholding the speech of the land-folk and helping them to purify and improve it, to render it impossible for interested persons to establish any barrier between the free intercourse of all classes of society. Philology in this case has a vital and practical importance. Looked at from the purely linguistic side there is no doubt that Oriya has ample proof of its individuality. The poems of Upendro Bhanj and his contemporaries are written in a language which hardly differs in a single word or inflection from the vernacular of to-day, and every word of which is distinctly intelligible to the meanest labourer. These poems, written three hundred years ago, exhibit a perfectly settled modern language, partly analytical and partly synthetical, but the analytical element of which has been so long in use as to have already undergone modifications of a secondary and even tertiary character. It retains unchanged forms which are older than the oldest Bengali or Hindi, and others which can only be compared with Bengali forms of three centuries ago, but which have long since died out from that language. Bidyapati, the contemporary of Upendro, writes, as we have seen, in a language more akin to Hindi than to modern Bengali. At a period when Oriya was already a fixed and settled language Bengali did not exist; the inhabitants of Bengal spoke a vast variety of corrupt forms of eastern Hindi. It is not till quite recent times that we find anything that can be with propriety called the Bengali language.

Sindhi and Marathi remain to be placed. For the former we have no data. Of the latter it may be said that its earliest poets exhibit a language less advanced in analytical develop-

ment than Hindi by about a hundred years, and which therefore must yield in point of antiquity to its northern sister.

In chronological sequence, therefore, we may place the Hindi with its subsidiary forms, Gujarati and Panjabi, first, fixing their rise and establishment as modern languages, distinct from their previous existence as Prakrits, in the eleventh century. Second comes Marathi, which remained a Prakrit till the twelfth or even thirteenth century; and third Oriya, which must have quite completed its transformation by the end of the fourteenth. Bengali was no separate independent language, but a maze of dialects without a distinct national or provincial type, till the seventeenth or beginning of the eighteenth century. It was not till the gradual decay of the central Muhammadan power of Delhi enabled the provincial governors to assume an independent position that Bengali severed itself from Hindi and assumed the characteristics which now vindicate for it a right to be considered a separate language. Sindhi having very little literature and no fixed system of writing remains a mystery. Its rise and development were independent of all the other languages, and I cannot determine its place in the sequence.

It is difficult to prophesy the future of this group, so much depends upon political changes which no man can foresee. It may, however, with much probability be surmised that the immense extension of roads, railways, and other means of communication, will result in the extinction of Panjabi and the dialects of Rajputana, and the consequent general adoption of one uniform language, the Persianized form of Hindi, from the Indus to Rajmahal, and from the Himalayas to the Vindhya. The language will then be spoken by upwards of one hundred millions of human beings; and from its vast extent and consequently preponderating importance, it cannot fail greatly to influence its neighbours. Gujarati will probably be the first to be assimilated; in fact, the difference is even now but slight,

and the relation between it and Hindi is similar to that between Icelandic and Norwegian. Gujarati, separated by political circumstances from the rest of Hindustan proper, has retained archaic words and forms which have died out from the mother-speech, but no violent changes would be required to re-assimilate it. Sindhi on the west, Bengali on the east, will resist absorption much longer: the former owing to its fundamental divergence of type; the latter by virtue of its high cultivation and extensive literature, though it may be mentioned that Hindustani is already much spoken and generally well understood over a great part of Bengal. Oriya and Marathi may probably continue to hold their own to a more distant time, though in both provinces the number of persons, even among the lowest classes, who are acquainted with Urdu is already considerable, and is daily increasing. In short, with the barriers of provincial isolation thrown down, and the ever freer and fuller communication between various parts of the country, that clear, simple, graceful, flexible, and all-expressive Urdu speech, which is even now the *lingua franca* of most parts of India and the special favourite of the ruling race, because closely resembling in its most valuable characteristics their own language, seems undoubtedly destined at some future period to supplant most, if not all, of the provincial dialects, and to give to all Aryan India one homogeneous cultivated form of speech,—to be, in fact, the English of the Indian world.

HINDI, MARĀTHĪ (Devanāgarī).	PANJĀBĪ.	GUJARĀTĪ.	BANGĀLĪ.	ORĪYA.	ENGLISH.
अ	ਅ	ઁ	অ	ଏ	a
आ	ਆ	ઁઁ	আ	ঐ	ā
इ	ਇ	ઇ	ই	ঊ	i
ई	ਈ	ઈ	ঐ	ঊ	ī
उ	ਉ	ઉ	উ	ঊ	u
ऊ	ਊ	ઊ	ঊ	ঊ	ū
ऋ	.	.	ঋ	ঋ	ri
ॠ	.	.	ॠ	ॠ	rī
ऌ ऍ	.	.	ঌ ঍	ঌ ঍	lri, lri
ए	ਏ	એ	এ	এ	e
ऐ	ਏ	ઐ	ঐ	ঐ	ai
ओ	ਓ	ઓ	ও	ও	o
औ	ਔ	ઔ	ঔ	ঔ	au
•	••	•	• •	• •	anuswāra, eto.
क	ਕ	ક	ক	ক	k
ख	ਖ	ખ	খ	খ	kh
ग	ਗ	ગ	গ	গ	g
घ	ਘ	ઘ	ঘ	ঘ	gh
ङ	ਙ	ઙ	ঙ	ঙ	ng
च	ਚ	ચ	চ	চ	ch
छ	ਛ	છ	ছ	ছ	chh

HINDI, MARĀTHĪ (Devanāgarī).	PANJĀBĪ.	GUJARĀTĪ.	BANGĀLĪ.	ORĪYĀ.	ENGLISH.
ज	ਜ	જ	জ	ଜ	j
झ	ਝ	ઝ	ঝ	ଝ	jh
ञ	ਞ	•	ঞ	ଞ	ñ
ट	ਟ	ટ	ট	ଟ	t
ठ	ਠ	ઠ	ঠ	ଠ	th
ड	ਡ	ડ	ড	ଡ	d
ढ	ढ	ढ	ঢ	ଢ	dh
ण	ਨ	॥	ণ	ଣ	n
त	ਤ	ત	ত	ଡ	t
थ	ਥ	થ	থ	ଥ	th
द	ਦ	દ	দ	ଦ	d
ध	ਪ	ધ	ধ	ଧ	dh
न	ਨ	ન	ব	ବ	n
प	ਪ	પ	প	ପ	p
फ	ਫ	ફ	ফ	ଫ	ph
ब	ਬ	બ	ব	ବ	b
भ	ਭ	ભ	ভ	ଭ	bh
म	ਮ	મ	ম	ମ	m
य	ਯ	ય	য	ଯ	y
र	ਰ	ર	র	ର	r
ल	ਲ	લ	ল	ଲ	l
व	ਹ	વ	ব	ବ	v, w
श	•	શ	শ	ଶ	s
ष	•	ષ	ষ	ଷ	sh
स	ਸ	સ	স	ସ	s
ह	ਹ	હ	হ	ହ	h
ळ	ੜ	ળ		ଞ	!

CHAPTER II.

ON VOWEL CHANGES.

CONTENTS.—§ 31. (1.) CHARACTERISTICS OF SANSKRIT VOWEL SYSTEM. (2.) VOCALISM OF RACES BORDERING ON INDIA.—§ 32. CHANGE OF अ TO इ.—§ 33. CHANGE OF अ TO उ.—§ 34. RETROSPECTIVE INFLUENCE OF इ AND उ.—§ 35. CHANGE OF अ TO ए.—§ 36. अ INTO औ.—§ 37. इ INTO अ.—§ 38. इ INTO उ.—§ 39. उ INTO अ AND इ.—§ 40. CHANGES OF QUANTITY—SHORTENING.—§ 41. LENGTHENING.—§ 42. GUṆA AND VṚIDDHI.—§ 43. ऋ AND ITS CHANGES.—§ 44. OTHER VOWEL CHANGES.—§ 45. INSERTION, OR DIERESIS.—§ 46. ELISION.—§ 47. VOWELS IN HIATUS.

§ 31. IN order that the examination of the vowel changes may be something more than a mere enumeration of facts, it is necessary, first, to consider the vowel system of the Sanskrit, and, secondly, to specify certain peculiarities of vocalization in the forms of speech which surround the present modern Aryan area.

(1.) As contrasted with Greek, Latin, Gothic, and other early languages of its own family, Sanskrit is remarkable for its preference for the *a* sound. Thus, Skr. *saptan* = *hepta*, *septem*, *sibun*, *septyni*, etc.; Skr. *agni* = *ignis*, *ugnis*, *ogni*, *anhus*; Skr. *aham* = *ego*, *ik*; Skr. *antar* = *inter*, *undar*, *indir*, *entos*; and many others. The same principle runs through the whole of

the inflectional system of the language. This assertion may not appear at first sight correct, but it must be remembered that in the case of nouns ending in *as*, *â*, *am*, the whole of the terminations, except four or five, have *a* or *â* for their principal vowel, and that this class of nouns constitutes a very large majority of those actually in use. The pronouns also exhibit a great preponderance of *a* terminations, and in the verbs the endings of the conjugational tenses, especially in the Bhû class, which embraces nine-tenths of the verbs in the language, display the same tendency.

In addition to this favourite and predominating *a* sound, there are the other two pure vowels *i* and *u* with their respective long vowels *î* and *û*, and this trilogy of pure sounds¹ maintains itself with peculiar constancy. There are none of those broken or impure vowels, in which other languages so much abound, with the exception of *e* and *o*, *ai* and *au*,—the two former produced by prefixing a short *a* to *i* and *u* respectively, the two latter by prefixing *â* to the same. These latter vowels, however, are almost entirely restricted in their use to derivatives and secondary forms, the dependent or complex meaning being thus philosophically brought into harmony with the broken or impure vowels. *E* and *o*, moreover, are always long, and thus preserve the consciousness of their diphthongal nature. The Keltic races appear first to have introduced a complicated system of broken or impure vowels, and Grimm thinks that through their influence a similar tendency grew up in the languages of the Teutonic family which lay nearest to the Keltic area, as the Anglo-Saxons, Frisians, and Franks. The Kelts, however, must have parted company with the Aryans at a very early date, and the latter consequently have not been affected by their disposition to corrupt the vowel-

¹ "Wie in der sprache überall waltet auch für den vocalismus trilogie. Aus drei vocalen stammen alle übrigen."—Grimm, *Gesch. d. Deutschen Sprache*, p. 191 (274, 1st ed.).

sounds. The modern Aryan languages retain many of the characteristics, in this respect, of their parent speech, and their vowels are still, as in ancient times, chiefly pure and simple.

It must, however, be further noted that Sanskrit permitted no hiatus, that is, no vowel could follow another without the intervention of a consonant; such forms as *meus*, *tuus*, would be foreign to its genius. The principal expedient adopted to prevent a hiatus was the hardening or thickening of the first of two vowels into its corresponding consonantal utterance, and in this manner many forms have been built up. In the spoken languages of early India, however, no such delicacy was felt, a consonant standing singly in the middle of a word was often dropped, and the two vowels thus brought into juxtaposition were allowed so to remain without any compunction. Nay, so far from feeling this objectionable, the Prakrit poets reject consonants to such an extent that their words are often mere floating masses of pulp from which all the bones have been removed. Thus, *prākṛita* becomes *pāua*; *subhaga*, *suhaa*; *niyoga*, *nioö*. In some instances the modern languages have retained Prakrit forms, but in so doing have kept the vowels quite distinct, so that no difficult or complicated vowel-sounds have arisen from their amalgamation. The foreigner, therefore, experiences no such difficulty in pronouncing the Indian vowels as he does in the French combinations *oeu*, *eui*, or the German *oe*, *ue*, nor are there any instances of two different sets of vowels having the same pronunciation as in the English, where *weak* sounds precisely the same as *week*; *meat*, *beat*, as *meet*, *beet*;¹

¹ In Old English the distinction was clearly marked. Our fathers from the fifth to the twelfth century, and even later, said *wac*=*weak*, and *weoc*=*week*. In many cases, however, our combination *ea*, pronounced as *i* in *machine*, is a corruption of Old English *eo*, as *georn*=*yearn*, *beom*=*beam*, *beotung*=*beating*, *eordhe*=*earth*, *beost*=*beast*, *corl*=*earl*, *heorte*=*heart*, etc. To this day our Wessex peasantry in Hampshire and Dorsetshire pronounce *ea* as two syllables, saying *neüt*, *beüst*, *weäk*, and the like. See Grimm, *Deutsche Grammatik*, vol. i., p. 239, compared with p. 541 (1st ed.).

nor are there any instances where the same combination has four or five different sounds, as in *cough*, *rough*, *bough*, *dough*, *hough*, *through*, pronounced *cauf*, *ruff*, *bow*, *do*, *hock*, *throo*.

(2.) Although, however, the vocalism of the Aryan group is singularly pure and simple, yet the area occupied by it in the present day is surrounded by peoples whose languages are remarkable for the excessive intricacy and difficulty of their vowel sounds. In the Chinese and its cognate dialects not only are the vowels in themselves complicated, but there exists a system of tones like those of music, by virtue of which a single vowel may have several distinct methods of utterance, and unless the word be pronounced correctly, not only as to sound, but also as to tone, the meaning is entirely changed.¹ As the languages of this group or groups touch the Aryan region along a great portion of its northern and eastern frontier, it may be suspected that their influence has been felt more or less; the more so as many of the races now located in the northern and eastern mountain-ranges have been driven out of the plains of India by the immigrants. Moreover, the low, tangled mass of hills which occupies so large a portion of Central India still harbours races of whose origin we know little more than that it is not Aryan, and whose vowel-system is essentially opposed to that of Sanskrit. Succeeding to these, on the south, are the Dravidians, even yet a puzzle to philologists, amongst whom broken, half-uttered, and impure vowels are frequent.

¹ I had several proofs of the difficulty of pronouncing these languages when travelling in Sikkim. I sat for some hours on a hill-side trying to pronounce the words *srum dei*, or something to that effect, meaning "hot water," in the Lepcha or Limbu language, I forget which, and had eventually to give up the task in despair. Frequently, too, in trying to say some of the few sentences of Bhotia which I knew, I found all around me convulsed with laughter; and on inquiry learnt that by giving the wrong tone to some unlucky monosyllable, I had converted "bread" or "fire" into something quite different, and generally very indecent.

I am not in a position to point out how far or in what direction Aryan vocalism has been influenced by these alien races; but that some sort of influence has been at work is almost beyond a doubt. It may, however, be conjectured that the pronunciation has been affected more than the written language, because the latter is always by conscious and intentional efforts kept up to some known standard. To one who has spent some years in the Panjab or Hindustan, the ordinary pronunciation of the Bengalis and Oriyas certainly sounds uncouth and foreign, and as these two races are surrounded by and much mixed up with non-Aryans, it is probable that the contiguity of the latter will eventually be found to have had much to do with this peculiarity. Unfortunately, however, pronunciation is one of those things which it is very difficult to express in writing, and we are thus deprived of the advantages which might arise from the study of this question by European scholars, who have access only to printed or written books. The question is therefore one which probably will not soon be settled.

The above remarks will have prepared the reader for the assertion that the modern Aryan vowel-system is practically identical with that of Sanskrit. There is little more to be done, in fact, than to note the few and unimportant changes which have taken place, and these are rather individual instances than examples of any generally operating laws. Certain peculiarities occur in this or that language, and the tooth of time has gnawed here and there at unprotected vowels, but little more than this can be said. The Prakrits have mostly wandered further from the Sanskrit type than the languages of to-day, because these latter, always conscious of the existence of Sanskrit and of its position as the parent and type of their speech, have in more recent times frequently had recourse to their common ancestor, and have corrupted the words resuscitated from it in a way peculiar to themselves, and often less violent than that adopted by the various forms of Prakrit.

§ 32. अ into इ.¹ This change does not occur so frequently or in the same way in the modern languages as it does in Prakrit or Pali. Of the examples given in Vararuchi (Pr. Pr. i. 3), *isi*, *pikkam*, *svino*, *vediso*, *viano*, *muingo*, *ingālo*, for Skr. *ishat*, *pakva*, *svapna*, *vetasa*, *vyajana*, *mridanga*, *angāra*, very few are found in modern tongues. G. has *पिकवुं* but also *पकवुं*, and *इंगारो* but also and more commonly *अंगारो*; M. *पिकण्ण*, *पिका*, etc. All the other words, in so far as they are used at all in a Tadbhava form, retain the *a* in all cases.

The Bhagavati supplies *saddhim*=*sārdham*, *puvvin*=*pūrbam*, *isi*=*ishad*, *mijja*=*majjā*, *mitthi*=*masti*, and *chikkh*, *chikkha*=*chaksh*, *chakshā*, together with those mentioned above, and one or two instances where य and ज have been melted down into the palatal vowel, and which therefore do not come under this head.

In the Saptasataka some more examples are given: *kivina* for *kripana*, "miser"; *putthi* for *prishtha*, "back"; *dippana* for *ātarpāna*, "dedicating"; *vināim* for *vinayam*, "modesty," with others which do not come within our present scope, as they are inflectional peculiarities only.

कृपण occurs only as a Tatsama in all except G. करपीण and M. किरपण. The G. form is, however, less corrupt than the Pr., and is therefore to be set down as a modern Tadbhava.

पुट्ठि is explained by Vararuchi as being for a feminine form *पुष्टी*, so that we have here no real change of *a* into *i*.

आइप्पण is probably for *आयप्पण*, according to the custom so frequent in Pr. writings of substituting य for nearly every consonant. It does not occur in the moderns.

¹ In this and the other chapters on Phonetics the examples given are drawn entirely from the crude or uninflected forms of words. No illustrations from the inflections, or from pronouns, adverbs, or particles are adduced. All such will be noticed in their proper places, and references will in those places be made to the laws laid down in this and the two following chapters. This arrangement is rendered necessary by the method followed in compiling this work, and, it is hoped, will tend to greater clearness and simplicity.

The modern languages have in this matter followed generally a different course from the Prakrit. The examples now given are exceptions rather than instances of a rule.

Skr. पञ्जर "cage," H. पिंजरा, and so in all. S. पिञ्जिरो, O. पिञ्जिरा.

Skr. गणन "counting," H., P. गिन्ना, but also, and in the rest, गन°.

Skr. नारङ्ग "orange," H. नारिंगी, but also नारंगी.

Skr. सञ्ज्ञान "wise," H. सियाना, P. *id.*, S. सिञ्चाणो, O. शिञ्चाण.

Many more isolated instances may be found, but few which run through all the seven languages. It cannot be laid down as a law, that the *a* of Sanskrit undergoes any regular or systematic transmutation into *i* in any dialect, or in any particular class of words. The Sindhi, however, and in a lesser degree the Gujarati and Panjabi, must be excepted from this remark. In the Introduction it has been stated that amongst those peculiarities of the seven languages which seem to depend on their relative geographical position, is the preference exhibited by the western languages for the palatal vowels *i* and *e*, as contrasted by that of the eastern languages for *u* and *o*. In the following list Sindhi converts *a* into *i*, and stands alone in so doing; the other languages retain the *a*. I give the Hindi alone as proof of this,—noting the other languages only when they do not conform to the Hindi in respect of this vowel.

Skr. कर्कट crab,	S. कांकिडी, but H. केकरा.	
„ कर्कटिका cucumber,	„ ककिडी	„ ककडी, O. काकुडी, B. <i>id.</i>
„ कर्कर gravel,	„ ककिडो	„ कंकर.
„ कर्बुर variegated,	„ कुबिरो	„ कबरा and काबर.
„ किरण ray,	„ किरिणि	„ किरन.
„ क्षण moment,	„ खिण	„ खन, खण, क्षण.
„ क्षमा pardon,	„ खिमा	„ छमा, but H. and P. also
„ धक <i>shove</i> ,	„ धिको	„ धक्का. [खिमा, छिमा.
„ अतसी linseed,	„ इल्सी	„ अलसी, Eastern H. तोसी.

Skr. वङ्क crooked,	S. विंगु, but H. बांक, °का.
„ वर्कर goat,	„ बकिरो „ बकरा.
„ पर्वन् a festival,	„ पिर्भ „ परब.

Here it will be noticed that this substitution of *i* for *a* occurs chiefly in short, open unaccented syllables, such as *kân-ki-ro*, *kâ-ki-dî*, *kû-bi-ro*; more rarely in closed and accented syllables, as *vin-gu*, *il-si*. The same practice occurs in Panjabi, where *i* is put for *a* in the short, open unaccented penultimate of infinitives; thus, Skr. *rahanam*, *sahanam*, *dahanam*, *kathanam*, *vahanam*, *labhanam*, become H. *rahnâ*, *sahnâ*, *dahnâ*, *kahnâ*, *bahnâ*, *lahnâ*, but P. *rahiñâ*, *sahiñâ*, *dahiñâ*, *kahiñâ*, *bahiñâ*, *lahiñâ*. In *lihineñ* from *lekhanam* M. has followed the same course, but this is a solitary instance. H. does the same in सुमिरन for स्मरण.

In many instances the P. puts in a short *i* after *h* following a short vowel, as

लहिर wave,	Skr. लहरी	H. लहर.
पहिर watch,	„ प्रहर	„ पहर, but also पहिरा.
पहिला first,	„ प्रथर	„ पहला, also and more commonly पहिला.
नहिर canal,	Ar. نهر	„ नहर.
बहिंगी banghy, ¹	Skr. वहङ्ग	„ बहंगी.

In words of this class in Hindi, though the *i* is not always written, yet in vulgar usage it is pronounced, and the *h* is dropped. Thus, the words above mentioned are generally sounded in talking, *pailâ*, *pairâ*, and the like. There exists a tendency to substitute the *i* for the *a* sound in words derived from the Arabic and Persian. Thus we have *nimak* for نمک *namak*, “salt”; *kaghiz* for کاغذ *kāghaz*, and others. In these cases Bengali sometimes goes further and gives *e*, as नेमक.²

¹ A pole for carrying burdens.

² See J. A. S. B., vol. xxxvii, part i., p. 32, “On the *Ist'mdl-i Hindi*,” by Mr. Blochmann.

Perhaps also, by the operation of this rule, we may trace back the numerous group of words, of which **फिर** and **फिरना** are the most used, to the Skr. root **स्फर** "to tremble," on the analogy of H. **तिरना** "to swim," Skr. **तरणं**.

§ 33. The next change is that of **अ** into **उ**. As we find the substitution of the *i* sound most frequent in the western languages, so we must look to the eastern for the *u* sound. Vararuchi gives no examples of this change. The obscure indications of such a change, which Lassen has picked up from ch. viii. of Var. (viii. 32, 68), are—(1) **वुट्ट**, and **खुप्प** for **मसज**, in which example we are not to consider *vutt* and *khupp* as derived from *masj*, which would be impossible; rather we have here two vulgar words which in Prakrit are used instead of the classical *masj*. *Vutt* is the origin of the common modern word **बुडना**, and reversed **डुवना** "to drown"; of *khupp* there seems to be no trace. (2) Var. viii. 32, *uddhmā*, *uddhumā*. An *u* is interpolated in the word *dhmā*, making it *dhumā*. But this is not a substitution of *u* for *a*, but an introduction of *u* in the middle of a nexus. (3) Var. viii. 23, **मुणइ** = **मनति** may be a genuine instance of this change, but if so it is a solitary one. The word **मुनि** "a sage," is classical Skr., and it is strange that the classical verb should have the *a*, while the vulgar one has the *u*, from which alone *muni* could have been derived. It is more probable that the original root was **मुन**, where the *u* has been correctly preserved by the people, but softened into *a* by the Pandits. (4) viii. 18, **सुमर** for **स्फर** is again an interpolation of *u*, not a substitution of it for *a*. H. **सुमिरन** = **स्फरण** rests on this form. (5) **पहुम** for **प्रथम** occurs, but less frequently than **पढम**.

Other examples are *saccaṇṇū* = *sucarṇa*, *vinnū* = *carṇa* (?), *āyukammunā*, *parakammunā*, = *ātmakarmanā*, *parukarmanā*; *mānsu* = *mānsa*, *huyavahu* = *hutavaha* (Bhāg.); in most, if not all, of which the presence of a labial consonant or vowel in the



original word has probably operated to produce the change. Instances in Bengali and Oriya are as follows :

Skr. ककैटिक cucumber, B. कांकुड, O. कांकुडी, but H. ककडी.

„ पर्कटी a tree, ¹	„ पाकुड	„ पाकड.
„ पटक a cloth,	„ पटुका, O. <i>id.</i>	„ पटका. [पुतिली.
„ पुचिका doll,	„ पुतुल	„ पुतली, but S.
„ पुष्कर tank,	„ पुखुर	„ पोखर.
„ वत्स calf,	„ बाकुर, O. बाकुरि	„ बकूर, बकड़ा.
„ [वलमान ² turning,]	„ बुर्मा gimlet,	„ बरमा.
„ वङ्गन brinjal,	„ बागुन	„ बैगन.
„ उदुम्बर fig-tree,	„ डुमुर	
„ द्विप्रहर second watch	„ दुपुर	„ दोपहर.
(noon),		
„ मसुर lentils,	„ मुसुर	„ मसूर.
„ मुषल pestle,	„ मुषल	
„ औषध medicine,	„ अषुद	„ औषध.
„ चालन winnowing	„ चालुनि ²	„ चालनी.

It will be observed that in nearly all these cases the *u* is introduced in short unaccented syllables. In fact, in all those syllables in which from their extreme shortness the vowel is indistinct, the natural tendency of the Bengali is to give it a labial sound, just as that of the Sindhi is to give it the palatal. The Bengali short *a* sounds at all times so like a short *o*, that in obscure syllables it naturally glides into *u*; and many words which in writing have an *a* might, if we followed the vulgar pronunciation, be written with *u*. The same holds good to a certain extent of the Oriya. In many cases, too, the fact of one short syllable in a word having the short *u* as its vowel

¹ *Ficus infectoria*, the beautiful large shady tree known to Europeans in India as the *pakar* or “pucker” tree.

² Most of these words are vulgar Bengali in constant use among the lower orders, though they are not all to be found in dictionaries.

seems to have exercised a sort of attraction over the neighbouring vowel, making that *u* also.

§ 34. When a syllable having *a* for its vowel is followed by one having *i* or *u*, these latter sometimes exercise an influence over the former, either by entirely superseding it, or by combining with it into the corresponding *guṇa* vowel. This proceeding is analogous to that discovered by Bopp with respect to the Zend and Old High German. Thus in Zend we have *bavaiti* = Skr. *bhavati*, *dadhāiti* = Skr. *dadāti*, *kerenūite* = Skr. *krinute*; and in Old High German *anst* "grace," makes in certain cases *ensti*, where, under the influence of the *i* of the termination, the preceding *a* has been compounded with an *i* also into *e*.

In the case of *u* we have in Zend the forms *haurva* = *harva* = Skr. *sarva*; *tauruna* = Skr. *taruna*.¹

Examples in the Indian languages:—

Skr. अम्लिका "tamarind," H., P. इमली, B. इम्लि.

Skr. अङ्घ्रि (अङ्घ्रि?) "foot," H., G. एङी, P. एड, M. *id.*, B. एङी in the sense of *heel*.

Skr. चक्षु "beak," H. चोंच, M. *id.*, B. चोंट.

Skr. सन्धि "hole made by burglars," H. सेंध, S. सेंधि, सेंधो,² B. and U. सिंध.

Skr. अङ्गुली "finger," H. उंगली, P. उंगुली.

Skr. चक्षु "eye," B. चौख, चौख, or चौख (vulgar).

There are even instances where the vowel of the last syllable supersedes that of the preceding one when it is other than *a*, as *i*, or *u*.

¹ Bopp, *Gram. Comp.* ed. Bréal, §§ 41-46-73. I quote from the French edition as being the latest and best form of this great work.

² In the sense of "friendship, connexion," which is one of the meanings of *sandhi* in Sanskrit.

Thus :—

Skr. विन्दु “drop,” H. बून्द, बुंद, M., P., G. *id.*, S. बुंडो, बूंद.

Skr. इक्षु “sugar-cane,” Pr. उच्छू, H. ऊख.¹

These instances, however, are rare.

By the aid of this law we can see our way to the affiliation of several words which have hitherto been obscure. Thus :—

Skr. पत्री “a tree” (पटी), H. पेड, M. *id.*, P. पेढ़.

Skr. पशु “cattle,” H. पोहे (dialectic in Gangetic Doab and Oudh).

Skr. मूषु “beard,” Pr. मंसू, मसू, H. मूँह “moustache,” B. मोह, G. मूह, P. मुच्छ, S. मुह.

For the consonantal changes involved in these derivations the reader is referred to the chapters on the single and compound consonants (*nexus*).

We have traces of this process in Prakrit, though Vararuchi (i 5), as usual, merely states the fact without attempting to give a reason for it. His examples are *sejjā*, *sunderam*, *ukkerō*, *teraḥō*, *achchheram*, *perantam*, *velli*, for Skr. *śayyā*, *saundarya*, *utkara* (?), *trayodaśa*, *āścharya*, *paryanta*, *valli*. Some of these words occur again in iii. 18, where he states that the *y*, as the last member of a weak nexus, is lost, showing how far he was from grasping the real facts of the case. In the first two examples of the latter passage *tūram*, *dhīram*, for *tūrya*, *dhairya*, there is no trace of the influence of the rejected *y* on the vowel of the preceding syllable, because in the first case the preceding vowel is *ū*, which will not in the Indian languages amalgamate with, or yield to, the *i*, and in the second case if there were no *y*, if the word were *dhairam*, it would become in Prakrit *dheram*; the influence of the *y* in *dhairyam* is shown in retaining the long *i* in the Prakrit *dhīram*.

¹ *Ukh* is in use in Eastern Hindustan; the word used in Western Hindustan is *ūkā*. This difference rests on the preference for the *i*-sounds in the western area, and that for the *u*-sounds in the eastern.

With regard to the other words, the modern languages carry on the Prakrit form in three cases, thus

Skr. शय्या, Pr. सेज्जा "bed," H. सेज, P., S. *id.*, G. शेज, M. *id.*, but in O., H. सज्या.

Skr. त्रयोदश, Pr. तेरहो "thirteen," H. तेरह, P. तेरां, S. तेरंह, G. तेर, M. तेरा, B. तेर, O. *id.*

Skr. वल्ली, Pr. वेल्ली "creeper," H. बेल, बेली, and so in all.¹

In the other cases the य is hardened to ज in writing as well as in pronunciation, and does not affect the preceding vowel. *Saundaryam* is not in use.

Skr. आश्चर्य, Pr. अच्चेरो "wonderful," H. अचरज "astonishment," P., S. *id.*, G. *id.* and अचरत.

Skr. पर्यन्त, Pr. परंत "limit," H. परजतं, B. and O. पर्यंत (pron. *parjanto*), M. *id.*

In the example *ukkerō* we have not an instance of the influence of the *i* or *y* on a preceding vowel, if Vararuchi be right in deriving it from उक्कर; but this is doubtful. The root is कृ *krī*, "to cast," and we might perhaps refer the Prakrit word to a form such as *utkīraṇam*. In the modern languages we find as follows:—

M. उकरो, उकरणे, उकीर, उकिरडा, all with various modifications of the sense of *heaping up* or *collecting*.

G. उकरडो, उकरो, उकेरो.

P. उकडू, S. उकिरण, उको, उगिडण, उगाडण.

Bopp, in the passage quoted above, seeks to ascertain whether the intervening consonant has any effect in hindering this reflexive influence, or epenthesis of *i* and *u*. He finds that this influence is arrested by a nexus, except *nt*, which sometimes

¹ The modern languages do not, like the Prakrit, treat *e* as a short vowel, and they therefore reject one of the two *l*'s, a double consonant being inadmissible after a long vowel.

does, and sometimes does not, hinder it. He also observes that many consonants, the gutturals including *h*, the palatals, the sibilants, and *m* and *v*, arrest this influence; *n* arrests it if the vowel be *ā*, but not if it be *a*; *b* generally arrests it. The examples hitherto procured of this process in the Indian languages do not afford sufficient data for determining this point, but a law may be detected which decides in what cases the epenthetic vowel shall combine with the preceding vowel, and in what cases it shall entirely supplant it. It may be thus stated:—when a nexus intervenes, the epenthetic vowel supplants, when only a single consonant intervenes, it amalgamates with, the preceding vowel. The reason of this is that the modern languages do not treat *e* and *o* as short vowels, as the Prakrit does, and they cannot endure to have a long vowel followed by a double consonant or a nexus. When, therefore, either of these two occur, the vowel must be short, and the *i* consequently supersedes and destroys the vowel whose place it has taken. Thus in *amlīkā*, *angult*, the nexus *ml*, *ng*, demand to be preceded by a short vowel, consequently in *imlt*, *unglt*, the *a* is entirely rejected; but in *patrī*, which had first become *paṭī*, and in *paśu*, there is only a single consonant, and the *i* and *u* therefore amalgamate with the preceding vowel into *e*, and *o*, *per*, *pohe*. In *chanchu* and *sandhi* the nasal is treated as an anuswāra, because in the first case we have merely a reduplicated form from a root *cham*; in the latter the word is compounded with the preposition *sam*, and in both cases the *m* is regularly replaced by the anuswāra, which is not strong enough to form a nexus, and the च and ध are each, therefore, regarded as a single consonant, and the long or *guṇa* vowel can stand before them.

§ 35. The change from ध to ए is rare in bases, though more frequent in inflections. Of the latter it is not here my intention to write. It will be found discussed in the fifth chapter.

Of this change among the modern languages Gujarati gives many instances. It must here be remarked that the spelling of most of these languages, owing to the want of a literary standard, is very irregular, and in the cases now about to be noticed, it is probable that the spelling has been made to conform to the pronunciation. If this had been done in Hindi and Panjabi, they too would to the eye seem to have changed the *a* into *e*. Thus the Skr. words quoted in § 32: *rahanam*, *sahanam*, *kathanam*, *vahanam*, *labhanam*, become in Gujarati रेहवुं, सेहवुं, केहवुं, वेहवुं, लेवुं. But, as has been shown, the Panjabi introduces an *i*, saying *rahinā*, and the Gujarati *e* seems to be only the amalgamation of this *i* with the preceding *a*, a process facilitated by the weakness of the *h* which separates the two vowels. In P. also, before *h*, the careless ordinary pronunciation results in a similar *e* sound. Thus we hear *rehnā*, *sehnā* for *rahinā*, *sahinā*, though the latter word is not frequent, and even in H. *rehtā*, *behtā*, is a not uncommon vulgarism in towns. In the verb *lenā*, from *labhanam* (Pr. *lahanam*), P. *lainā*, G. *lerun*, the *h* has dropped out from constant use, leaving only the *e*.

It amounts almost to a rule in G. that a preceding *h* is replaced by *e*, and a second *e* is even inserted after the *h*, especially in cases where in Skr. an *i* stood in that place. Thus:—

H. लहर	P. लहिर	G. लेहेर	wave,	Skr. लहरी.
„ पहला	„ पहिला	„ पेहलुं	first,	„ प्रथर.
„ बहिन	„ बैन्ह	„ बेहेन	sister,	„ भगिनी.
„ बहिरा	„ बहिरा	„ बेहेरो	deaf,	„ बधिर.

The same takes place in words borrowed from Arabic or Persian. Thus:—

Arab. ذَهَشَت	fear,	G. देहशत.
„ رَحِم	pity,	„ रेहम.

Arab. **تَحْصِيل** collection, G. तेहसील.

„ **زَهْر** poison, „ जेहर.

„ **قَهْر** severity, „ केहर.¹

It is not, however, only in G. that traces of this process can be found. Marathi has also instances of the same character. Thus, नेहमी “constantly,” from Skr. निचम; पंगणे, पंगुळणे “to limp,” “to go wearily,” from Skr. पङ्गुल “lame.” Perhaps also पेंठ “a town,” from Skr. पट्टन. So also घेणे “to take,” Skr. ग्रहणं, from which also is H. घेरना, M. घेरणे “to inclose,” “surround”; झंप a “spring” or “jerk,” Skr. झंप; झंडा “flag,” H. झंडा; डेकर “a belch,” H. डकार, P., S., G. *id.*, but B. also डेकार, O. डेकुर, Skr. उद्गार.

Instances also occur in the other languages, in which not only *a* but even *ā* is thus modulated, as

Skr. नकुल “weasel,” H. नेवला, P. नेऊळ, O. and B. नेउल.

Skr. दा “to give,” H. देना, and so in all; similar to which is M. मेजणे “to measure,” from Skr. मा. M. corrupts also Arabic and Persian words in this manner, as खेरिज, Ar. **خارج**; तेजी, Pers. **تازی**; तेरीख, Ar. **تاريخ**; हिसेब, Ar. **حساب**.

This process, which is irregular and capricious, resembles our own English habit of turning *a* (आ) into *e* (ए); thus, we pronounce *cane* as केण, *male* as मेल, *rate* as रेड, instead of काण, माल, राट, as do all other European nations.² The *e* in the modern Indian languages is never short, as in Prakrit, but is constantly long.

¹ On the subject of the effect of *h* on vowel-sounds, and its tendency to associate with itself the broken vowels (=in Sanskrit the *guṇa* and *vriddhi* series), see Grimm, *Geschichte der Deutschen Sprache*, vol. i., p. 216 of the 3rd edit., p. 308 of the 1st and 2nd.

² Grimm, *Deutsche Gram.*, vol. i., p. 541; where our modern *a* is written *aa*, and as he says, “lautet bald *æ*, bald *é*, bald *ā*; dem angelsächsischen *ā* (hochdeutsch *ea*) entspricht es nirgend mehr.”

In addition to the instances mentioned above may be noted the case of अय *aya*, which sometimes contracts into *e*, just, as will be seen further on, as अव *ava* contracts into *o*.

Examples:—

Skr. नयन “eye,” S. नेणु, G. नैन, but H., P. नैन.

Skr. निश्चय “certainty,” H. निहचे, S. निहिचे, निश्चे.

Skr. समय “time,” H. समे.

This process, however, is rare, and such forms are not used by correct speakers or writers. निहचै or °चय, समै, समइ, समय are all more accurate, as well as more usual methods of writing. The अय, which is the characteristic of the causal verb in Sanskrit, is never changed into ए in the moderns, but undergoes a peculiar treatment of its own.

The breaking down of *a* and *ā* into *e* seems to be one of those points where non-Aryan influences have been at work. The Sanskrit admits of the modulation of *i* into *e* by the addition of an *ā*-sound, but it does not include within the range of its phonetic system the opposite process of flattening *a* into *e* by the appendage of an *i*-sound. This transition is foreign to the genius of the ancient language, in which *e* is always long. The Dravidian languages, however, possess a short *ē* as one of their original simple vowel-sounds, side by side with the *ē* corresponding to Skr. ए. The Tamil further substitutes for the Skr. ऐ i.e. आ + इ a sound *ei*, i.e. *ē* + *i*. This short *ē* of the Dravidians is often found in Canarese to replace the *ā* and *ā* of Sanskrit, and in Tamil *ei* corresponds thereto. Thus, Skr. काक “crow,” becomes in Tamil *kākkei*, in Telugu *kāki* (probably for *kākē*), in the Kota and other forest dialects of the Nilgiris *kākē*. Skr. घोटक (seemingly a non-Aryan word) is traceable in Tamil *kudirei*, Canarese *kudurē*, Kota *kudare*, etc. So also “the long final *ā* of Sanskrit abstracts becomes in Tamil *ei*, e.g. *āśā*, ‘desire,’ Tamil *āsei*; *Chitrā*, ‘April-May,’ Tamil *Sittirei*. The same *ā* becomes *e* in Canarese, e.g., *Gangā*, ‘Ganges,’ is in

Canarese *Gange* or *Gangeyu*.”¹ The first trace of the adoption of this short *ĕ* by Aryan populations is found in Prakrit, and takes the form, not of a distinct sound from the long Sanskrit *ē*, but of a shortening of that sound itself. Thus, words which in Sanskrit exhibit long *e* followed by a single consonant occur in Prakrit with *e* followed by a double consonant. As Prakrit is always very careful to preserve the quantity of Sanskrit words, it is apparent that the common people who spoke Prakrit, having come to regard *e* as a short sound, felt it necessary to double the following consonant in order to preserve the quantity, the vowel which in Sanskrit was long by nature becoming thus long by position. Thus, we get Pr. **पेम्** for Skr. **प्रेम** “love,” **एक्कं** for Skr. **एकं** “one,” **देव्वो** for Skr. **देव**. These words were pronounced with a short *ĕ*, as in English *get*, *bed*, and the barrenness of invention of the persons who reduced Prakrit to writing is shown by their omitting to provide a separate character for this new sound, as the Dravidians have done. It would be rash, in the present imperfect state of our knowledge on the obscure subject of the relations between the Dravidians and early Aryans, to lay down any definite law on this point; but it is noteworthy, that the Aryan tribes who came most closely into contact with Kols and Dravidians exhibit the greatest proclivity towards the use of these broken vowels. Oriya and Marathi have long been spoken in tracts partly peopled by non-Aryans: in the case of the former by Kols and Telingas; in that of the latter by Gonds, Bhils, and Canarese. The Aryans of Gujarat also displaced non-Aryan tribes, and may from them have caught this trick of speech, as may also the Bengalis from the numerous wild tribes on their frontiers.²

¹ Caldwell's *Dravidian Grammar*, pp. 98, 99.

² The Bengali language, as actually spoken by all classes, from the highest to the lowest, differs in many respects from the language as written in books. Especially is this noticeable in the treatment of the vowel **आ**, which in colloquial usage is

In this way we may account for the common M. word ठेवणे "to place," as from Skr. स्थापनं. The universal word टेकना "to prop" is also thus referable to स्था; as is ठेलना "to shove," used in all the languages, deducible from स्थल्. Many more examples will probably occur to the reader, of words the origin of which has hitherto been uncertain, but which, by the operation of this tendency, may be traced back to familiar Sanskrit roots.

To be distinguished from this class of words is that where the two syllables, both vocalized by *a*, of a Sanskrit word are replaced by a single syllable bearing *e*. As

Skr. कदली "plaintain," H. केला, P. *id.*, M., G. केळ.

Skr. कृगल "goat," O. हेली, B. *id.*, S. हेलो.

Skr. बद्धर "jujube," H. बेर, P. *id.*, S. बेह. B. बद्धर.

Here we see the result of the Prakrit habit of eliding the single consonant and replacing it by य, so that we get *kayali*, *chhayala*, *bayara*, which, as in the case of नयन and similar words, is contracted into *e*. Bengali shows the word still in a transitional stage. The rules regulating the treatment of those vowels which are brought into juxtaposition by the elision of an intervening consonant are exhibited in § 46.

frequently, in fact almost universally, corrupted into ए. The following are familiar examples:

दिलाम् "I gave,"	colloquially	दिलेम्.
खाइया (khā) "having eaten,"	„	खेये (khē).
छाडिया "having left,"	„	छेडे.
वांचिया "having survived,"	„	वेचे.
नाडिया "having moved,"	„	नेडे.
आगा "before,"	„	एग्ये (egye).
पाछा "behind,"	„	पेचे.

This Bengali *e* is pronounced more like the English *a* in *mat*, *rat*, etc., than like the full Italian *e* in *veno*, *avete*, etc., and seems to be a lineal descendant of the short *e* of Prakrit.

It will not have escaped notice, that many of the remarks in this section refer rather to a change from *ā* to *e*, than from *ā* to *o*. The reason of this is that the treatment of the two sounds is so exactly the same that it was found impossible to keep them apart. Another remark is, that though the short *ĕ* of the Dravidians seems to have had its influence on the modern Aryan languages, yet the *e* of the latter is always long, and the short *ĕ*-sound, wherever it exists, is represented in writing, not by ए, but by इ, as in Sindhi. In languages which are so careless and capricious as these, in their methods of expressing sounds in writing, some confusion is inevitable. It may, however, tend to simplify the matter, if we lay down the rule that ए always in all the languages expresses a *long* sound, even though it represents a corruption from Sanskrit अ or आ, brought about by the influence of the non-Aryan *short* ĕ, which originated in all probability the short ĕ of Prakrit.

The whole matter, however, is very obscure at present, and deserves to be made the subject of a separate investigation, both from the Aryan and non-Aryan points of view.

§ 36. अ into ओ. This change is very rare. Vararuchi's instances are not to the point. They are *voram*, *loṇam*, *ṇomallidā*, *moro*, *moho*, *chotthi*, *choddaḥ*, for *badara*, *lavana*, *navamallikā*, *mayūra*, *mayūkha*, *chaturtha*, *chaturdaś*. In all these words what has taken place is either elision of a consonant, by which two vowels are brought into contact, or softening of the semi-vowel *v* into *u*, in both cases giving rise by contraction to *o*. The syllable *ava*, except when initial, in all cases in Prakrit is shortened into *o*, though not unvaryingly so in the modern languages.

व्यसाय "labour," "trade," H. वेवसाय, व्योसाव, O. वेउसा.

व्यहार "custom," H. व्योरा, P. बेओरा.

लवङ्ग "clove," Pr., H. लौंग, P. लौंग, S. लौंगु, O. लंग (*lōngō*).

Here may also be introduced the H. and P. **बेचोटना** or **ब्योटना**, "to cut out clothes," which would be from a word **व्यवकर्त्तनं**, or something of that sort. The words beginning with *vyava*, such as *vyavahāra*, *vyavasāya*, and the like, are written in a great variety of ways in the modern languages. See Chapter III. § 53, and Chapter IV. § 90.

(1.) Of the words given above, **बोर** is used only in M. The forms **बेर** and **बहर** have been explained in the last section. O. has **बर**, pronounced *bōrō*, probably a shortening of the Pr. **बोर**.

(2.) **लोण**. In this word the syllable *ava* generally appears as *ū*. H. **लून**, **नून**, and only rarely **नोन**, B. **नून**, G. **लूण**, P. **नूण**, S. **लूण**, O. **नूण**. M. uses **लोण** as the name of a plant growing in salt soil, probably contracted from **लावणिक**, where *o* = *āva*.

(3.) *Nomallidā*, not in use; the ordinary name for the flower is *chameli* = *champakeli*.

(4.) **मोर**, so in all the modern languages. Here we have elision of *y* and coalition of *a* + *ū* = *o*. I am inclined to think that *mor* is the original word derived from the cry of the bird, and that *mayūra* is a piece of Brahmanical euphuism.

(5.) **मोह**, not in use, except in the poets.

(6, 7.) **चोथो**, **चउहही**. All the moderns have forms in *o* or *au*, the natural result of the coalescence of *a* and *u* after the elision of *t*, but no true change of *a* into *o*. The words are—

H. **चौथा**, P. **चौथा**, S. **चोथो**, G. *id.*, M. **चौंथा**, O. **चौठ**, B. **चौटा**.

H. **चौदह**, P. **चौदां**, S. **चोडहूँ**, G. **चोद**, M. **चौदा**, O. **चौद**, B. **चौहा**.

Isolated instances are M. **बोकड**, Skr. **वर्कर**, "goat," where the Prakrit form would be **बक्ररो**, and the modern **बाकरा**; the influence of the labial consonant having produced the still further change to *o*. Bengali has **कुमोर** "potter," from **कुम्भकार**; **कुतोर** "carpenter," from **सूत्रधार**; **लौंगर** "anchor," from Persian **لنگر**, and a few others. In all these cases the tendency appears

to be more towards lengthening *ā* into *o*, than *a* into the same.

§ 37. इ into अ. Vararuchi's examples (i. 13) are *paha*, *haladdā*, *puhavi*, for *pathin*, *haridrā*, *prithivī*. *Paha* is probably the Prakrit form of Skr. *patha*. *Pathin* is only one of several forms, and it is not therefore fair to bring this example in here.

Haladdā is H., O. हलदी, M. हळद, P. हळदी, हळधी. B. characteristically introduces its favourite labial vowel हलुद. S. has thrown the र forward, where it amalgamates with and strongly cerebralizes the ड arising from द्र, at the same time the two vowels coalesce into *ai*, thus हैड, *haidra*.

पृथिवी is also पृथ्वी, and is not therefore a fair example. The word is little used in the moderns, and either as a Tatsama or as a Tadbhava in the form पिथी.

H. बादल "cloud," if inverted from वारिद, may be an instance, but the derivation is not quite satisfactory. In M. वादळ means "a dust-storm," which would suggest the Skr. वातर, वातल, or वातुल. In H., P., B., and O., however, the word means "a rain-cloud," not "a dust-cloud."

Pr. इअ for *iti* is not in use in the moderns.

Skr. कठिन "difficult," P. कठण, S. कटनु, G. कठण.

Skr. किट्ट "dirt," M. कट, काट.

Skr. गर्भिणी "pregnant," P. गरभण, गब्भण G. गाभण, M. *id.*

Even long *ī* is thus changed in

Skr. परीक्षा "examination," H. परखाना, परखैया B. परख, परखाइ, M. पारखणै, पारखी, G. परखवुं, परखनार, P. *id.*, S. परखणु.¹

Skr. विभूति "cowdung ashes," H. भवूत, P., G. *id.*, S. भभूति.

Skr. मिल "to meet," becomes in G. only मळवुं, in the rest it is मिल°.

¹ Of these pairs of words the first means testing coin to see if it is good by receiving it at a bank, etc.; the second, a tester or trier of coin. The occupation is almost hereditary, and the Parkhiyas have attained almost magical dexterity.

§ 38. इ into उ. Skr. वृश्चिक "scorpion," Pr. विञ्चुओ, H. बिक्छा, M. विंचु, P. बिच्छू, S. बिछू, but B. and O. बिछा. Var.'s other example, Skr. इचु=Pr.उच्छू, has already been explained by epenthesis (§ 34). *Vinchhuo* is probably to be explained as contracted from a form वृचुक, which is quite as possible a derivative from root व्रश्, as *vrīschika*.

Skr. शिङ्ख "to smell," H. सूघना.

Skr. गेरिक "red chalk," H. गेरू, M. *id.*, O. गेर, G. गेर.

Skr. कुट्टिनी "bawd," O. कुट्टणी.

Skr. तितंडी "tamarind," O. तेतुंली.

With regard to these last two changes, as well as that from *a* into *i*, the modern Indians embarrass the student by the obscurity of their pronunciation, which is such that these three short vowels are with difficulty distinguishable from one another. In dictionaries and printed works the vowel which *ought to be* pronounced is shown, but it cannot be said that this is the vowel which *is* pronounced in all provinces. The proclivity of the western languages for the *i* and *e* sounds, as also that of the eastern dialects for the *u* and *o* sounds, introduces confusions which are not fairly exhibited in their literature.

Consequently, changes in these vowels which are authorized by writers are comparatively rare.

§ 39. उ into अ and इ. Here also instances are few, and Vararuchi has had to resort to some doubtful words, as *maūdam*, *maūlam*, for *mukūṭa*, *mukula*, where Skr. has also *makūṭa*, *makula*. *U* becomes *i* in Pr. in *puriso* for पुरुष, but the moderns use *purusho*.

U is changed to *a* in Skr. कर्बुर "variegated," H. काबर, कवरा, G., M., P., *id.*; कुटुम्ब "family," H. कुटम, S. कुटुम्, G. कुटम. S. has also कुटिम. H. बिजली from Skr. विद्युत् "lightning," so also in B., M., G., and P.; O. has बिजुली. The common M. जयणें "to collect," is by Molesworth derived

from Skr. यूथ; H. and G. have the substantive जथा, जथो "a company." Skr. सुरङ्गा "a mine," changes to सुरंग H., सुडंग B., but सिरिच S. गुद् "anus," becomes गांड in H., P., G., M., and O., unless, which is most probable, the older vulgar word was गण्ड, of which गुद् is a softening.

U is altered to i in some finals, as Skr. वायु "wind," H. बाइ, B., G., S., *id.*, in the sense of "rheumatism," which the Indians believe to be caused by wind, though several languages have also forms in u or o, as H. वोओ, B. *id.*, M. वाव, P. and S. वाउ, O. बाअ, but this form means "wind" simply. So also विन्दु "a drop," becomes H. बिन्दी, P. *id.*, S. बिंडी, O., M., G. बिंदी, in the sense of "a dot over a letter," such as that used to indicate anuswāra, while in the general sense of "a drop of rain, blood," etc., it retains the u. In O. the Skr. बालुक "sand," is बालि, S. वारी, B. वाली, but in the others with u.

§ 40. Changes in the quantity of vowels are twofold—the shortening of long vowels and the lengthening of short ones.

The long vowel is shortened in the case of all three vowels.

Examples:—

(1.) आ becomes अ, primarily in unaccented syllables. In a word consisting of two syllables, both of which are open, that is, end with a vowel, if one syllable contain a short accented vowel, while the other has a long but unaccented vowel, the latter not unfrequently becomes short; thus, Skr. yáthā, táthā, become in Pr. *jaha, taha*, optionally, as well as *jahā, tahā*. It is difficult to decide whether the Hindi obtained its forms जौ, तौ from the former or the latter of these, or from some other form altogether; the modern languages, in the majority of the very numerous pronominal and adverbial series which they contain, appear to have received from the old Aryan little more than the radical parts *ka, ya, sa, ta*, and to have evolved the various formations from their own resources. There are found cases where a long vowel is shortened without any assignable organic

cause; probably in such cases the metre is the reason. Thus, *āyaria*=*āchārya*, *pajjava*=*paryāya*, *gahie*=*grihitāḥ*. Before a double consonant or nexus, also, the vowel is shortened, as in *kantam*=*kāntam*, *anhāna*=*āsnāna* (which paves the way for the modern नहाना), *appā*=*ātmā*, and others (Bhāg.). From Vararuchi come the following :

Skr. प्रस्तर "a bed," oxytone, Pr. *pattharo*, *patthāro*. Here the organically long syllable coming immediately before the accent is naturally liable to be slurred over. There is, however, a special inconvenience in shortening this word, as it becomes thereby identical with *pattharo*, from प्रस्तर "a stone." S., however, has both पथर "a bed," and पथर "a stone." M. has पथारी in the first sense, and पथर in the second; the other languages have only the latter.

Skr. तालवृन्तक "a fan," Pr. तलवेंतअं, not in use in the moderns.

Skr. चामर "a chowrie," Pr. चमरं and चा°, but the form with the short vowel is also in use in Skr. The moderns have H. चौरी, P. *id.*, S. चौर, G. चौरी, M. चौरी and चामर, O. चँअर, B. चमरा; *chaunri* and the rest give no clue, as they may come equally well from च° or चा°.

Skr. प्रहार "a blow," Pr. *paharo*, *pahāro*; in poetry the quantity varies according to the exigencies of the metre,—in Saptas. 7 it is long, in *ib.* 28 short. The word is now seldom used.

Skr. चाटु "flattery," Pr. *chaḍu*, *chāḍu*; not in use.

Skr. हालिक "belonging to a plough," Pr. *halia*, or *hālia*. O. हलिआ "a plough bullock," M. हली. The words of this kind in the modern languages are rather recent formations from हल "a plough," in which, according to usage, the system of *guṇa* has been neglected.

There is also a very numerous class of words in Sanskrit which have a long vowel preceding two consonants, *i.e.* a nexus. Prakrit assimilates the first of these two consonants to the last

and shortens the vowel. Hindī and the others, except Panjabi, reject one of the two consonants, and as a compensation restore the preceding vowel to its original quantity ; as a type of this class may be taken Skr. मार्ग "a road," Pr. मरगो, H. मांग. This change in the vowel depends on the succeeding consonants, and is discussed in detail in Chapter IV.

As additional instances of real vowel shortening, the following are to be noticed :

Skr. माया "delusion," H. मया, S. *id.* ; the last syllable here is not only long by nature, but is also accentuated.

Skr. मार्जन "polishing," H., P. मंजना ; in the rest, however, मा°, which is also a common form in H. In मंजन "tooth-powder," the short vowel is retained.

Skr. महार्घ "dear (costly)," H. महंगा, but M. महाग, S. महंगो, P. महिंगा, G. मोघं.

Skr. सर्पहार "snake-catcher," H. सपेरा (*i.e.* सपहिरा), सपेडा, P. सपिआधा, सपेला.

Skr. देवालय "temple," Pr. देउल्ल, S. देवली, H. देवल, M. देवळ, B. देबल, but P. देवाला.

Skr. कासीस "vitriol," H. कसीस, P. *id.*, S. कसु.

In all the above cases it may be laid down as a general rule that the contraction of the long *ā* into *a* is due to a long or accented vowel following ; an accented vowel, whether long or short, universally retains its quantity more accurately than an unaccented one, even though it be long.

(2.) ई into इ. Prakrit examples with their modern equivalents, where there are any, are as follows :—

Skr. पानीय "water," Pr. पाणिअं. This is the common word for "water" in use now. It is written in all पानी or पाणी, universally with long *ī*.

Skr. अलीक "false," Pr. अलिअं, but H. अलीक.

Skr. व्यलीक "painful," Pr. वलिञ्चं and विलिञ्चं.

Skr. तदानीम् "then," Pr. तआणिं.

Skr. करीष "cowdung," Pr. करिसो.

Skr. द्वितीय "second," Pr. दुइञ्चं, P. दूजा, दूआ, G. बीजो, S. बीजो, बिओ. Not in use in the rest.

Skr. तृतीय "third," Pr. तइञ्चं, P. तीजा, S. दिओ, G. तीजे. Not in use in the rest.

Skr. गभीर "deep," Pr. गहिरं, so H. गहिरा or गहरा, and so in all. The Tatsama form गम्भीर is also in use.

Skr. शीतकाल "cold weather," Pr. सीआरो, S. सिआरो.

Skr. स्निहा "spleen," H. पिलई, पिलही, M. पिहा, P., O. पिह्हा, B. पीला; but स्निहा also in Skr.

Skr. कील "a pin," S. किली, H. किल्ला, M. *id.*, O. किला, P. किल्ल.

(3.) ऊ into उ. The only Pr. instance is मऊञ्चं for मधूक "a tree" (the *Bassia latifolia*). H. restores the quantity महुआ, but G. uses a diminutive with a resulting short vowel, मऊडुं; P. महुआ.

Modern examples are:—

Skr. कूप "a well," S. खुऊ, M. कुवा, G. कुवो; in the rest it is long.

Skr. कूर्दनं "leaping," S. कुड़णु, G. कुदवुं.

Skr. घूर्णनं, "whirling," H. घुमना, घुमडी, P. *id.*, S. घुमणु, G. घुमवुं, M. घुमणें, O. घुरिबा, B. घुमडी, but घूरण.

In the majority of cases, however, the modern languages preserve the quantity of the Sanskrit vowel with great fidelity before a single consonant. The two main disturbing elements are the accent and the nexus. The Prakrits being dead languages, we only know concerning them that which has been handed down in writing, and it cannot be too often repeated that Indian writers of all ages are untrustworthy guides to the spoken languages, as they all consider themselves entitled to alter or "improve" words at their will.

Considerable difficulty arises in some of the languages from the careless method of writing employed, by which, especially in *i* and *u*, the long vowels are often written where short ones should be, and *vice versâ*. Gujarati, for instance, may be said to make practically no distinction between *î* and *i*, *û* and *u*. I have seen the same frequently in Oriya correspondence, where बीग्यापन is written for विज्ञापन, कीही for किहि (किश्चित्). In the more accurate Marathi, also, the same practice occurs, as in सापन्न, सापिंड, for सपत्नी, सपिण्ड. This is, it may be said, mere vulgar corruption, but it must be remembered that vulgar corruptions are the cause of nine-tenths of the changes in language. Pandits, of course, in writing restore the vowels to the quantity they bear in Sanskrit, so that we cannot always tell how far the lengthening or shortening has become an established colloquial habit, or how far it is merely misspelling.

Inasmuch as the shortening of a long vowel is generally due to the presence of another long or accented vowel immediately following, so a word containing a long vowel shortens that vowel when it becomes the first member of a compound, or in derivatives where a heavy termination is added. Thus, पानी "water," becomes पन in the H. words पनभत्ता (पानी and भात) "water and boiled rice," पण्डूबी (पानी and डूबना) "a diver," पनसाला (पानी and शाला) "a watering place," पनकुकरी "a water-hen" (पानी and कुकड़ी), पनहारा "a water-carrier"; बात "a word" becomes बत in बतबढाव "prolixity," बतबना "a great talker," बतकहाव "loquacity," बतझड "talkative"; बाट "a road" becomes बट in बटोही "a traveller," बटपड "a highwayman," बटवार "a road-tax" or "toll," बटिया "a narrow passage." From बीज "seed" come बिजा "a stallion," बिजाला "seedy," बिजार्ई "seed-corn." From फूल "a flower," फुलवारी "a garden," फुलेज "an oil scented with flowers" (फूल + तेज), फुलकारी "flowered cloth," फुलझडी "a kind of firework," फुलना "to blow" or "be inflated."

This rule is more fully carried out in Hindi than in the

others. Instances, however, from the other languages are here given :

Marathi धूप incense,	धुपकाडी, धुपांगरा, धुमारती, धुपेल, etc.
„ धूळ dust,	धुळवड, धुळवडणें, धुळारा, धुळाबर.
„ मूठ fist,	मुठा, मुठाळा, मुठेल.
„ मूत urine,	मुतखडा, मुतरा, मुतरी.
„ भीक begging,	भिकारी, भिकवाली, भिकाळ.
„ नीट straight,	निटाई, निटावणें, निटस.
„ काम work,	कमाऊ, कमावणें.
„ लाख a lakh	लखपति, लखलाभ.
Gujarati पाणी water,	पणघट,
„ फूल flower,	फुलकुंकुं, फुलवारी, फुलदार.
„ भीख begging,	भिखारी, etc.
Panjabi पाणी water,	पणकपडा, पणवाही, पणिआंद, also पन०.
„ बीज seed,	बिजाई, बिजाउणा, बिजार.

It has been thought advisable to introduce these modern examples in this place, because they afford proof that there does exist a tendency to make the quantity of the foregoing vowel subservient to that of the following, and this tendency explains the instances of real shortening of Sanskrit long vowels. The modern examples are not, as regards Sanskrit, true shortenings, inasmuch as the vowel now shortened had in many cases only become long by some process in the Prakrit period, and had been short in the Sanskrit. I must not be understood, however, to express a belief in a Sanskrit period prior in point of time to a Prakrit one; by the words “Prakrit period” is meant that stage of the language in which the rules of Vararuchi and others were in sole operation, as contrasted with that in which Sanskrit forms were in existence either alone or side by side with more popular ones.

§ 41. The short vowel in Sanskrit is lengthened in the

moderns when the nexus by which it is followed is dissolved, and one consonant only remains, as सप्तन् = सात, चन्द्र = चांद.

This depends on consonantal laws, and will be found discussed in Chapter IV.

The cases given in Var. i. 2, are not found in modern times, and probably owe their existence to metrical exigencies. The same cause may with probability be assigned to such forms as *khippām* = *kshipram*, *gāhāvati* = *grihapati*, *vītyvahaī* = *vyatipatati*, and others (Bhâg.).

The geographical gradation from west to east of certain tendencies has already been mentioned. One example comes under the present head. Sindhi and Panjabi prefer short vowels, but P. generally follows them up by a double consonant, while S. does not. Hindi has two faces, as usual, in this matter; in its western area it inclines to the short vowel, in its eastern to the long. Bengali prefers the long vowels, and puts them in unnecessarily, just as often as Sindhi does the short ones. Thus we have

Skr. वत्स "young of an animal," B. वाच्छा, Eastern H. बाच्छा, Western H. बचा, P. बच्चा, S. बचो. Of course in these western words the influence of Persian بچه is to be allowed for. कच्छप "tortoise," H., P. कक्कूआ, S. कक्कुं, but B. काक्किम.

वरण्ड "portico," B. वाराण्डा, H. वरंडा; most of our wise-acre *literateurs* in Hindustan now-a-days consider this word to be derived from Persian برآمد, and write it accordingly. It is, however, good Sanskrit.

The following list exhibits a long vowel in Bengali, where as a rule the other languages have the short; Hindi, as the most central in this respect, being neither too prone to shorten nor to lengthen, is shown as a contrast.

Bengali पाथर stone,	Hindi पत्थर
„ पाटा a lease,	„ पट्टा
„ पाका ripe,	„ फक्का

Bengali	पागडी turban,	Hindi	पगडी
„	पाहाड hill,	„	पहार
„	फाठान to burst,	„	फटाना
„	बाती candle,	„	बत्ती
„	बाटखारा weight,	„	बटखारा
„	बाटुआ purse,	„	बटूआ
„	बाटेर quail,	„	बटेर
„	भाटी distillery,	„	भट्टी
„	भाण्डार granary,	„	भंडार
„	माचान scaffold,	„	मचान
„	हालका light,	„	हलका

In some of these instances the other languages agree with Bengali, and in such of them as are of known derivation the long vowel arises from the desire of compensating for the loss of one of two conjoined consonants following. This desire is felt and expressed by most of the other languages. It is, however, not given effect to in them when a long vowel occurs in the subsequent syllable, or when there is a long heavy termination which removes the pressure from the initial syllable. Thus, H. *pāhār*, *bātkharā*, *baṭēr*. In these places the Bengali retains the long syllable in writing, though, owing to the peculiarly harsh pronunciation of the lower orders in Bengal, it is difficult to decide whether they mean to say *bāti* or *bati*, and the like.

But apart from these peculiarities of Bengali, there do exist cases in which a short vowel in Sanskrit becomes long in modern languages.

Thus, (1.) अ is lengthened to आ in

Skr. सहनं “bearing,” M. साहणें.

Skr. खट्वा “bedstead,” H. खाट, G., M., O. *id.*, B. खाट, खाटजा.

Skr. यसनं “swallowing,” M. यासणें.

Skr. दहनं "burning," H. डाहना, and so in all, in the sense of *burning with anger*, etc.

Skr. चलनं "going," M. चालणें, O. चालिबा.

There may be a few other verbs of this sort in the other languages; but it is in Marathi that most examples of lengthening the root vowel of the infinitive are to be sought for. In *sāhnen*, *grāsnen*, *chālmen*, there seems no reason for the change.

(2.) ई is lengthened to ऐ in

Skr. विंशति "twenty," H. बीस, B. बीश, M. वीस, G. वीश, P. बीह, S. वीह.

Skr. त्रिंशत् "thirty," H. तीस, M. *id.*, P. तीह, S. टीह.

Skr. जिह्वा "tongue," H. जीभ, and so in all except S. जिभ.

Skr. कठिन "hard," M. कढीण.

M. lengthens the इ of इनी in Sanskrit feminines from adjectives in इन्, as हस्तिनी "she-elephant," M. हत्तीण, Skr. भगिनी, M. बहीण, Skr. सुवर्णकारिणी, M. सोनारीण, where H. has बहिन, सोनारिन. Such words generally bear the accent on the penultimate in Skr., which accounts for the vowel being lengthened in M. Skr. शिथिल "loose," rejects the first syllable, and becomes H. ढीला, through Pr. सिद्धिल (Var. ii. 28); here the lengthening is apparently compensative. P., however, has दिह्वा, S. दिलो or दिरो, and B. and O. write occasionally दि° as well as ढील.

(3.) उ is lengthened to ऊ in

Skr. कुल "a family," M. कूळ, though also कुल.

Skr. मुषल "pestle," H. मूसल, B. मूषल.

Skr. पुर "town," H. पूर, and so in all.

In this last instance पुर in Sanskrit bore the accent on the first syllable, and was a dissyllable *pū-ra*; but when the modern languages rejected the final *a*, and made the word a monosyllable, the weight of the accent naturally lengthened the vowel. मुषल

is accented on the first, *mú-sha-la*; here also the rejection of the final *a* threw more weight on to the first syllable. M. कूळ is the same, *kūḷ* for *kū-la*. In fact, in most of the above cases the lengthening is due to the rejection of some termination or final syllable, which throws the accent on the syllable that remains, just as the cases of shortening were seen to be caused by the addition of heavy formative syllables. These languages are for the most part very sensitive in this respect, except Oriya and Bengali, where, especially in the speech of the lower orders, long vowels are shortened and short ones lengthened without any regard to the origin or etymology of the word.

§ 42. Those peculiar forms of augment called *Guna* and *Vṛiddhi* in Sanskrit come next to be considered. Being entirely absent from Prakrit, they can hardly be expected to occur in modern Indian dialects. In Prakrit *e* and *o* are simple vowels, often considered short, as *ě*, *ô*, and followed by a double consonant. Thus, *ě* is used as equivalent to *i* in *peṇḍam*, *piṇḍam*; *ṇeddā*, *ṇiddā*; *sendūram*, *sindūram*; for Skr. *piṇḍa*, *nidrā*, *sindūra*, and other words. *E* is also substituted for *i* in *ṇeddām*, *āpelo*, *keriso*, for *nīda*, *āpīda*, *kīdrīś*. In the first of these words the consonant is doubled, making the *e* short, but in the rest it is long. Similarly *o* is written for *u* in *tonḍam*, *mottā*, *pokkharo*, *potthao*, for *tunḍa*, *muktā*, *pushkara*, *pustaka*. But we sometimes find the reverse, *i* being put for *e*, as in *vianā*, *diaro*, for *vedanā*, *devara*; *veanā*, *dearo*, are, however, also in use. Owing to the inherent brevity of *e* and *o* in Prakrit, this process is not uncommon. *E* is shortened to *i* in *inām*=*enam*, *iyanām*=*etanām* (*eteshām*), and sometimes the following consonant is doubled, as in *ikka*=*eka*, *chittijjā*=*tisṭhet* (through *chitṭeyā*). *O* is similarly shortened to *u* in *uya*=*ojas*, *paluvama*=*palyopama*, *appussue*=*alpotsukas*, etc.

In the *Vṛiddhi* forms *śaila*, *śaitya*, *airāvata*, *trailokya*, the *ai* is softened into *e*: *selo*, *sechcham*, *eravaṇo*, *tellokkam*; in other

cases the diphthong is split into *ai*, i.e. ऐ = अइ, as *daichcho*. *Chaitto*, for *daitya*, *chaitra*. Parallel to this, *au* is softened to *o* in *jovvanam*, *komuī*, for *yauvanam*, *kaumudī*, or dissolved into अउ in *paūro*, *paūriso*, for *paura*, *paurusha*.

Lastly, *i* is given for *ai*, and *u* for *au*. Instances are *sindhavam* for *saindhavam*, *sunderam* for *saundaryam*. In this case we may perhaps merely say that the vulgar formed these words by adding the necessary terminations without making use of the grammatical process of Vṛiddhi.

Something analogous to the Sanskrit Guṇa occurs in cases where, from consonantal corruptions, a short vowel has to be lengthened, but instead of performing this lengthening by the corresponding pure vowel, the Guṇa vowel is resorted to. Thus, कुष्ठ "leprosy," would by the ordinary rule become कूठ, and by a further step कूढ. It does, however, become H. कोढ (*koṭh*), S. कोड़ह, G. कोढ, and कोड, M. *id.* So also the adjective कुष्ठिन "leprous," becomes H. कोढी, M., O. *id.*, G. कोडिन्नी, S. कोडह्यो. Skr. कुचि "belly," is H. कोख. Skr. कुदाल "a hoe," S. कोड़रि, G. कोदारो, B. कोदाल, O. कोडा. Skr. विल्ला "the bel tree," H. बेल, and so in all. Skr. मुक्ता "a pearl," H. मोती, and so in all. Skr. शिम्बा "a bean," H. सेम. In these cases a mere lengthening in the direction of the original vowel would have produced कूख, कूदाल, बील, मूती, and सीम. Looking to the remarks made in § 35, it seems probable that in this case also there are indications of a non-Aryan principle at work. It is clear, however, that the vowels *e* and *o* are in these instances, and all similar ones, long, and not, as in the Prakrits, short.

I have very little to say about the forms which words take which have already undergone Guṇa or Vṛiddhi in Sanskrit. Such words most frequently occur as Tatsamas or very recent Tadbhavas. Except in Tatsamas, Vṛiddhi vowels are of rare occurrence in all the languages, *ai* being generally turned into *e*, and *au* into *o*. Thus, गैरिक "red chalk," becomes गेह, as quoted above. कैवर्त्त "a fisherman," H. केवट; गौर "pale," H.

गोरा, and so in all; चौर्य "theft," H. चोरी; झूलिक "pouch," H. झोली, and so in all; O. and B. have also झुलि and झूली.

The vowels *ai* and *au* arise, however, in the modern languages from contraction. Especially is this the case with *au*. When, therefore, it is said that the Vriddhi vowels are rare, it is not meant that *ai* and *au* are rare; what is meant is that, except in Tatsamas or pure Sanskrit words in their strict Sanskrit shape, words which have been derived from primary nouns, by lengthening the root-vowels *i* and *u* to *ai* and *au* respectively, do not occur. Thus, from पुत्र "a son," comes पौत्र "a grandson," but Hindi, followed by most of the others, says पोता. Oriya sometimes in such cases uses only the long pure vowel, as in झूली, and sometimes only the short, as in पुतुरा "nephew," from पौत्र.

We may perhaps conclude from this, that the system of derivation by Vriddhi, though not altogether an artificial one, was not carried out in all its perfection by the vulgar, and that the elevation of a vowel to its second or Guṇa power was all that took place in practice. The long diphthongs take their origin from very different causes, such as the softening of *प* in the middle of a word into *व*, and subsequently into *उ*, thus coalescing with a preceding *a*, not as in Sanskrit into *o*, but *au*; e.g. कपर्द "cowrie-shell," makes first कवड्ड, and in H. कौडी, whence our English corruption of "cowrie"; or from the absorption of *म* in a similar manner, e.g. वामन "dwarf," H. बीना, where B. more fully exhibits वाउनिया. *प* does, however, occasionally melt into *o*, as बीना "to sow," Skr. वपनं.

In बैल, मैला, थैली, from बली, मली, खली, we have instances of the retrospective influence of the *i*, noted in § 34; while in ऐसा, कैसा, तैसा, and the like, the diphthong has arisen from elision of the *र* of Prakrit forms एरिसो, केरिसो, for Skr. ईदृश, कीदृश, or perhaps rather from some such colloquial forms as *ādrīś*, *kādrīś*, so that the Prakrit would form *āriso*, *kāriso*, whence by elision of the *r* there would naturally result *ā-īśā*,

kâ-isâ; for to deduce *ai* from *e+i* is a proceeding for which there is no analogy in any of the languages, and which seems *primâ facie* unnatural and improbable.

§ 43. **अ** and its changes. The Prakrit treatment of this Protean vowel had better be kept separate from its later developments, as the utmost care is necessary to prevent inextricable confusion.

(1). It becomes *a* in *taṇam*, *ghanam*, *maam*, *kaam*, *vaddho*, *vasaho*, for *ṭṛina*, “grass,” *ghṛinâ*, “pity,” *mṛita*, “dead,” *kṛita*, “done,” *vṛiddhi*, “old,” *vṛishabha*, “a bull.” Bhāmaha says this and the following changes only occur when **अ** is initial.

In Bhâg. occur *tachcha*=*tritya*, *âhachcha*=*âhritya*, *haya*=*hṛita*, *mae*=*mṛita*, *kada*=*kṛita*.

(2). It becomes *i* in *ist*, *vis*, *gitthî*, *ditthî*, *sitthî*, *singâro*, *mianko*, *bhingo*, *bhingâro*, *hiam*, *viin*, *vin*, *hiam*, *kisaro*, *kichchâ*, *vinchhuo*, *sialo*, *ki*, *kis*, *ki*, *ki*, for *ṛishi*, *vṛishi*, *gṛishṭi*, *dṛishṭi*, *sṛishṭi*, *ṣṛingâra*, *mṛigâṅka*, *bhringa*, *bhringâra*, *hṛidaya*, *vitṛishna*, *vṛimhita*, *kṛisara*, *kṛityâ*, *vṛishchika*, *ṣṛigâla*, *kṛiti*, *kṛishi*, *kṛipâ*.

(3). It becomes *u* in *udû*, *mundlo*, *puhavi*, *vundâvaṇam*, *pâuso*, *pâutti*, *viudam*, *samvudam*, etc., *parahuo*, *mâuo*, *jâmâuo*, for *ṛitu*, *mṛinâla*, *prithivî*, *vṛindâvana*, *prâvṛish*, *prâvṛitti*, *vivṛita*, *samvṛita*, etc., *parabhṛita*, *mâtrika*, *jâmâtrika*.

(4). It becomes *e* in *talaventaam*, *geha*, *genhadi*, for *tâlavrîntaka*, *griha*, *grihṇâti*. *Geha* occurs even in Sanskrit. This change is not noticed by Vararuchi.

(5). It is written **रि** in *riṇam*, *riddho*, *richchho*, for *ṛiṇam*, *riddha*, *ṛiksha*; and in the compounds *eriso*, *sariso*, *târiso*, and the like, for *îdriṣa*, *sadriṣa*, *tâdriṣa*; and especially when initial, as *riuvêda*=*ṛigvêda*, *risaha*=*ṛishabha*.

(6). In **वृ** “a tree,” it is changed into *ru*, becoming **रुक्खो**.

As regards modern times, there are practically two **अ**. The first is that grammarian's letter which, as Bopp has shown, represents a rapid pronunciation of a radical *ar*, and the *i* of

which is merely indicative of a light, half-heard vowel-sound. Accordingly, in his last edition of the *Comparative Glossary*, the illustrious author writes *kar*, *mar*, *darś*, *bhar*, for *क*, *मृ*, *दृश्*, *भृ*, etc. The second, though of similar origin to the first, has completely superseded the form from which it arose, and has firmly established itself in the language at an early date; such is the *च* in *चच*, *चतु*, *चषि*, etc. With regard to the first *रि*, the probability is that it never had any real existence in popular speech, and in discussing the modern words arising from roots in *रि* we cannot say that we have examples of a change of that letter. It would be incorrect, for example, to cite *karnā*, *marnā*, *bharnā*, as instances of the change of *रि* into *a*, parallel to that in Pr. *tanam* from *trīṇa*, because in reality *karnā* is from *karaṇam*, *bharnā* from *bharaṇam*, and there has never been any question of *रि* in the matter.

The actual *च* which became a living fact, and not merely a grammatical fiction, was apparently pronounced precisely in the same way as *रि*, and accordingly in those languages which have not had their alphabets remodelled by Pandits, this artificial *च* has no existence. Hindi, Panjabi, Sindhi, and Gujarati know nothing of it, and always write the words where it occurs with *रि*, as *रिषि*, *रितु*, etc., whenever they occur in a Tatsama or modern Tadbhava (*i.e.* a very slightly altered) form. In early Tadbhava words, however, this real *रि* undergoes many changes; by far the most frequent of which is that into *इ*, of which the following are examples :

कृषक "a husbandman," H. किसान, P. किसान.

गृध्र "vulture," H. गिद्ध, गीध, M. गिधड, गीद, गीध, G. *id.*, B. गिध, S. गिद्ध, P. गिद्ध.

घृत "ghee," H. घी, घिउ, P., G. *id.*, S. गिद्ध, B. घि, O. घिन्न.

तृण "grass," H. तिनका, P. तिण, S. तोली, M. तन, B. तिनका, तिलका.

वृश्चिक "scorpion," H. बिकूआ, etc. (See § 38.)

भ्रातृज "nephew," H. भतीजा, P. *id.*, S. भाइयो, G. भचिजो.

शृंग "horn," H. सींग, P. सिंग, S. सिङ्ग, M., G. शिंग, B. शिङ्ग,
O. शिंगा.

Many more instances might be given, but the above will suffice. As an additional proof that this vowel was from an early date regarded as identical with **रि** may be adduced the fact that in many cases it becomes long *i*, because the *r* of *ri*, under the operation of the rules of the nexus (see Chapter IV., § 83), becomes assimilated to the preceding consonant, which necessitates the lengthening of the vowel.

The root **दृश्** is the parent of many modern words. It is probable that this root was originally written with **ष**, and was, in fact, **दर्ष**, or **दर्च**; traces of this form survive in some tenses of the verb, as **अद्राच**, by an irregular *guṇa*, for **अदाच**, **द्रच्यते**, **दृचीष्ट**, **दिदृचते**, and in the cognate Greek *δέρκω*, Lith. *zerkōlas*, Russ. *şerkolo*, Irish *dearcaim* (Bopp, *Gloss. Comp.*, s.v. *darś*).

When or how the **ष** was softened to **श्** cannot be, of course, distinctly stated, but it was evidently after the formation of the Pr. **देक्ख**. The **ष** or **च** of the older form leads back to **अच**, **ईच**, and other verbs of *seeing*, and renders it unnecessary to suppose with Weber that Pr. **देक्ख** is derived from the desiderative form *didriksh* (Bhâg., p. 414, note 3). From this form, which I suppose to be the *oldest* as well as the most used, come H. **देखना** and the similar verbs in the others, B. **देखन**, M. **देखणें**, G. **देखवुं**, P. **देखणा**, S. **डेखणु**, O. **देखिवा**.

Another form of this root dates from the time when the form *driś* had become finally fixed,—Pr. **दिस**, **दीस**, H. **दिसना**, P. *id.*, S. **डिसणु**, G. **दिसवुं**, M. **दिसणें**, O. **दिशिवा**. In all but S. this word is neuter, and means "to be visible," "to be in sight," a less simple and original meaning than that of *dekh*, which latter therefore, by this consideration, also establishes a claim to be looked upon as the earlier form. It is perhaps worth notice that in scenic Prakrit a very frequent word for "seeing" is

pekkh, for प्रेक्ष्, and that possibly the existence of this verb may have had some influence on the creation of the somewhat anomalous form *dekkh*. The idea is based on the well-known fondness of the Indians for jingling words of similar sound; so that *dekh*, *pekh*, would be a similar form to *ultā-pulā*; *bāt*, *chīt*; *aghal*, *baghal*; *ās*, *pās*; *dhakkam*, *dhukkā*; *jhūth*, *mūth*; and many others in Hindi and Marathi, as well as in the other languages. To return, however, to other developments of the root: the third and latest series is that with the base *darś*, which has given in all the languages the Tatsama substantive *darśan*. O. and B. have also simple verbs दर्शिते, दर्शिवा, and causals दर्शादते, and दर्शादवा; M. दर्शविणे, and poetical दर्शविणे "to hint," "insinuate" (causals in form). G. दर्शवुं, "to see," S. इशणु "to point out," should apparently be also referred to this series. The substantive दृष्टि "sight," becomes Pr. दिट्ठि, H. दीठ, दीठि, also डीठ, P. डिट्ठु, S. डित्ति, G. adverbially दिट्ठ or दिठ, meaning "at," "per head," "each"; M. दीठ.

Similar in treatment to दृष्टि are the following:

पृष्ठ "back," H. पीठ, B. *id.*, O. पिठि, P. पिट्ठु, G. पिठ्ठ.

पृष् "to beat," H. पीटना, B. पीटिते, O. पिटिवा, M. पिटणे, G. पिटवुं, P. पिटणा, S. पिटणु.

मृष् "to rub," H. मिठना "to efface," B., O. *id.*, G. मिटवुं, M. मिटणे, P. मिटणा, S. मिटणु.

In some instances M. prefers the *a* sound, which is even lengthened to *d*, as in पाठ = पृष्ठ,¹ दाखविणे, "to show," H. दिखाना, etc.; माती "earth," Skr. मृत्ति; B., G., and O. have here also माटी; and H., though मिट्टी is the usual form, has also मट्टी, and in some rural dialects माटी. In cases like this we should perhaps be justified in referring to Vṛiddhi forms मार्त्त°,

¹ By this fortunate change all confusion is avoided between this word and पीठ "flour," from Skr. पिष्टं.

पाष्ठ, etc. Other instances of *ri* going into the *a* sound are तृष्ण "thirsty," M. तहान, for तान्ह or ताह; but the western languages and Hindi hold to the *i*, as H. तिरखा (through तिनखा), P. तिहा, S. टिहाइ, टिह, etc.

कृष्ण "Krishna," Pr. कखो, कंहो, H. वान्ह, कन्हाइ, कन्हैया, P. *id.*, S. कानु, G. कान्हो "a boy," कन्हैया "playful" (from the character of Krishna), M. कन्होवा (कृष्णपति).

शृङ्खल "a chain," Pr. सिंखलो, H. सांकर, P. संघर, S. *id.*, G. सांखळ, M. *id.* B., however, has शिकल, O. शिकळ, and H. also सिखर and शीखर.

In Pali *ri* nearly universally appears as *a*; thus, कृत becomes *kata*, हृदय *hadaya*, and a hundred others. The antiquity of Pali, as compared with other species of Prakrit, is additional confirmation of the assertion that *ri* was originally regarded as *ar* or *ra*.

The root वृध् is sometimes treated as *vardh*, at others as *vridh*. In the former case it naturally retains the *a* sound. Thus, वृद्ध, when regarded as a participle, meaning "increased" or "large," is treated as though it were वर्द्ध, and by rejecting the aspirate forms H. बडा "big," P. वड्डा, S. वडो, B., O. बड, G. वडो; but when regarded as an adjective in the special sense of "old," we find the *ri* fully recognized as an established fact, and, owing probably to the influence of the labial, it passes into *u*. Thus, H. बुड्डा and बूढा "an old man," बुड्डी and बुढिया "an old woman," P. वुढा, वुढी, S. वुढो, B. बुडा, बुडो, O. बूढा, बूढी, G. बुढो, बुढी.

वृत् is another root which has widespread ramifications. In Prakrit the derivatives of this root generally appear to have exhibited the *u* sound, as *pautti*, *viudam*, *samrudam*, *nirvudam*, *vuttanta*, for *pravritti*, *virita*, *samvrita*, *nirvrita*, *vrittanta* (Var. i. 29); but in the Jain Pr. of the Bhâgavatî the Sanskrit forms *vritta*, *pravritta*, are found, and the ordinary form *vart* goes into

vatt, as *vattai* for *vartate*. So in *Saptaś.*, with a further loss of *v*, we find *niattai*, *niattanta*, and once *nivvutta* (§l. 156). In the modern languages there are, first, a number of words of the form बट or वट, derived from various parts of the root. Thus :

H. बट्टा “discount,” “exchange,” P. वट्टा, बट्टा, S. वटो, वटा, G. वटाव, M. बट्टा, O. बटा, B. वाँट्टा, perhaps from Skr. वार्त्ता, in the sense of *trade, business*.

H. बटना “to twist,” P. बटुणा, S. वटणु.

There are very numerous derivatives in all the languages from these forms; also in the form वाट, बाट, as H. बाट “a road” (Skr. वर्त्तन), and so in all.

Peculiar to Bengali is the verb बटे, meaning literally “it is,” वर्त्तते, but ordinarily used as an emphatic affirmative, “yes, truly.” It is conjugated in all three persons :

Singular	मुइ बटि	Plural	आमि बटि
”	तुइ बटिस	”	तुमि बट
”	ए बटे	”	तिनि बटेन

The Oriya has अटे or अटइ for “it is,” which may have arisen from rejecting the व, though I feel inclined to give another origin to this word. The Marathi verb वाटणे, in its sense “to seem,” “appear,” is also to be brought in here. Thus, *āj pāūs parel sâ râtato* = “It seems likely that rain will fall to-day.”

Secondly, the moderns take the forms बत, बात, as in H. बात, “a word,” Skr. वार्त्ता. And finally there are strings of Tatsamas, as वृत्तान्त, and the like; but on the whole this root appears always to have been treated as *vart*, and seldom or never as *vrit*.

Ri goes into the *u* sound somewhat rarely, and generally after labials; but it must be remembered that this vowel is in several provinces pronounced by the vulgar *ru*, where it occurs in

current Tatsamas; this is especially the case in Orissa, Maharashtra, and Gujarat.

Skr. प्रावृष "rain," M. पाऊस. It is rare in H., and is sometimes written पावस.

Skr. स्मृति "memory," H. सुरत, P. *id.*, S. सुर्ति.

Skr. पृष्ठ "back," S. पुठि, P. पुट्ट. P. has also पिट्ट, and all the others except M. have the *i* sound.

The common nouns of relationship पितृ, मातृ, भ्रातृ, become in Pr. पिआ, माआ, भाआ, and in P. पिऊ, माऊ, भाऊ, भराऊ, S. पिउ, माउ, भाउ. This must not be regarded as a change from *ri* to *u*, as these words really ended in *ar*. It seems probable that even in Prakrit a nominative *pitaro* was formed, from a desire of avoiding the multifarious Sanskrit declensions and reducing them all to the simplicity of the ordinary declension. The *o* in Pr. corresponds to the masculine termination *as*, *ah*, of Sanskrit, and in Sindhi is shortened to *ũ*. The long *ũ* in P. is also a trace of this Pr. *o*. Similarly in old Hindi a long *ũ* is often found as a termination, though in modern Hindi very few traces of this form can be found.

The past participle मृत, from मृ "to die," becomes in Pr. मदो, मओ, मुओ; in H. मुआ, P. मुइआ, S. मुओ, G. मुवुं, but M. मेले, O. मला.

Skr. भ्रातृजाया "brother's wife," H. भाऊज, भावज, भौजी, भौजाइ, etc., P. भावो (= भ्रातृवधू), S. भाजाइ, B., O. भाउज, M. भावजाई, where the place of the *ri* is occupied by *au*, *o*, *u*, etc.; but, on the other hand, भ्रातृज: "nephew," becomes H. भतीजा, P., G. *id.*, S. भाइयो.

Here there are two different treatments of *ri*: in *bhāuj* it becomes *ũ*, in *bhatijā*, *i*. The cause appears to lie in the relative antiquity of the two words; *bhatijā*, though now a word in daily use, has a suspiciously modern look; when we find *bhrātri* alone had at an early age lost its *t* and become *bhāā*, *bhāu*, and *bhāi*, we are led to ask how *bhatijā* can have retained

that letter; and following the analogy of the languages, we are forced to conclude that it is a modern Tadbhava, formed at a time when *bhrātri* with its grammatical termination *ri* no longer existed, except in books. Two arguments aid this theory: one is the conversion of the *ri* into *ṛ*, showing that this letter must have become fixed and identified with रि; and the other is, that in the cognate languages, except P. and G., which are in many respects little removed from dialects of Hindi, the word has no existence. In vulgar Bengal the term in use is भाइ पुत्र *bhāi puo*, i.e. भ्रातृपुत्र. In Oṛiya *puturā*, i.e. पौत्र. In Marathi we have only the Tatsama. S. *bhāityo* is evidently inverted from भाटियो, where, the *ri* being regarded as रि, the *r* has cerebralized the dental.

Cases where the *ri* is actually written as रि are numerous in H. and P., and to a less extent in S. and G. M., B., and O. are too Pandit-ridden to allow of this. Instances are गृहस्थ "householder," H. ग्रिहस्थ, P. ग्रिसती, गरिसती, S. ग्रिहस्तु, G. ग्रस्थ. वृक्ष "tree," H. व्रिक्ख (rare). दृढ "firm," P. दरिढ (*drirh*).

As words of this class are mostly Tatsamas or very recent Tadbhavas, the method of writing them here given may be set down as a mere instance of bad spelling. Far more common is the transfer of *ri* into इर or अर—as

Skr. वृत्ति "maintenance," H. बिते "a religious endowment," P. बिरत, विरत, S. विरउ (for विर्तु) "rations."

Skr. वृद्ध "aged," P. बिर्ध.

Skr. तृप्त "satisfied," Old H., P. तिरपत (*tirpat*), but also तिपत, Old B. *id.*

A mass of words in which तृ "three," forms the first element are indifferently written त्रि, तिर, तर, and ति, in H. and P. Much of this is mere ignorance or carelessness. गृह "a house," becomes even in Skr. गेह, and this form continued in use till the twelfth century. It is now universally replaced by घर; which takes us back to a form गर्ह, probably the real original

form of गृह. In this case the modern languages have preserved the more ancient and popular form. That this form was in use to a certain extent in early times is proved, not only by its occurrence in Prakrit, but also by the compound words नैहर, पिउहर, etc. पिउहर or पीहर is for पितृघर, *i.e.* पितृगृह "father's house." नैहर is also written नहिहर and नहियर, but the first is the true spelling and is apparently from नियघर, *i.e.* निजगृह "own house."¹

§ 44. Other vowel changes. Short *a*, though not an ambiguous sound, having always the same value as our English *u* in *but*, is nevertheless a very brief dull sound, and is easily in pronunciation modified by an admixture of other sounds. Especially is this the case with a short dull *ai* sound in M. and P. Both of these, though in exactly the opposite way, confuse this sound with *a*. Thus Panjabi changes the *ai* of certain words into *a*, as in Skr. बैरागी "a beggar" (*soi-disant* 'religious!'), P. वरागी. बैतरणी "the river Baitarnî," P. बतणी. Ar. خیرات "alms," P. खरात. This peculiarity is one of speaking rather than of writing, and correct writers would probably restore the *ai* to its place. It arises from the influence of the long vowel following; even in the case of *Baitarnî* the vowel which was short in Skr. becomes long by position, through the elision of the second *a*, by which the *r* and *n* are brought together and form a nexus. To return now to the converse change, by which a short *a* is replaced by *ai*: the M. gives a good typical example in मंद "slow," Skr. मन्द. Other instances are—

Skr. वङ्गन "egg-plant," M. बैंगन, so also H. बैंगन, B. बेगुन, P. बैङ्गण, O. बेगुण.

Skr. वसन "sitting," M. बैसणें, so also in rural H. बैसना.

Skr. पट्टन "town," M. पैठण, "name of a certain town."

¹ Married women of the lower classes in India are perpetually running off to their fathers' houses, either to pay a visit or in a fit of anger with their husbands. These two words are thus in constant requisition.

Skr. परं, "but," M. पै, so also H. and P.

Skr. परं "beyond," M. पैल (for परल as in P. पला), पैला, पैलाड and many derivatives. H. also पै, "upon."

Skr. प्रसरण "spreading," M. पैसाव (= परसाव).

A similar process may be noticed in H. in the forms पैतीस "thirty-five," पैतालीस "forty-five," पैसठ "sixty-five"; the first element of which is पंच; so also in सैंतीस "thirty-seven," and the rest of the series. Another instance is पैढा "a road," from पन्थाः. In all these examples it is not the extra-long diphthong of the Sanskrit that we have to deal with, but an obscure sound which has probably crept into the speech of the vulgar from Dravidian or Kol sources; and the *ai* is thus connected with the Tamil *ei*, and belongs to the same series of processes as those noticed in § 35, where the *a* and *ā* of Aryan utterance has been corrupted into a short almost inorganic *ē*. It will be observed that the shortness of this sound is shown by its constant use before a long vowel.

Other changes may be dealt with separately, as they do not yet seem to point to any systematic law or rule, but, as far as investigations have gone, appear to stand alone. Thus, for instance, there is the Skr. फुस्फुस "lungs," Pali पप्फासं,¹ Pr. probably फुप्फुसो. This undergoes the following changes: H. फेफरा or फेफडा, B. फेपडा, फोपसा, and फोपडा, O. फंसफंस and vulgarly फौइफौइ, S. फिफिडु, M. फोपीस. Here we have every imaginable variety of vowels, and the changes are peculiar to this word, giving hardly any analogies to any others. The only solution appears to be that in Sanskrit even there existed more than one form of the word, which is to a certain extent onomatopoeic, and derived from some root imitative of the sound of breathing or blowing. In classical Sanskrit, as usual, only one of the various forms in use among the people has been retained. Another anomalous change is that of नूपुर "an

¹ *Khuddaka Pāṭha*, by R. C. Childers, J. R. A. S., vol. iv., p. 311, new series.

anklet," into नेपूर. This change of *u* into *e* occurs as early as Prakrit. The substitution of *e* for sounds with which it has apparently no relation is seen again in Skr. गोधूम "wheat," H. गेहूं, S. *id.*, B. sometimes *id.* In some parts of Hindustan the more regular form गोहूं is, however, heard also.

To complete this collection of paradoxes may be adduced M. and G. कापूस "cotton," Skr. कर्पास; M. बोरपी, also भोरपी, भोरपी, "a juggler," Skr. बज्ररूपी; M. भानामती "jugglery," Skr. भानुमती. M. contains a great number of these irregular forms, and the other languages will doubtless be found to do the same when they shall have obtained the advantage of being set forth and explored by observers as diligent and accurate as Molesworth.

I do not attempt to account for the changes noted above beyond the allusion to the probability of a non-Aryan element in them. It is so very difficult in the present elementary state of the comparative philology of the group under consideration to determine what is, and what is not, really a form in general use, that there is an ever-present risk of wasting time in discussing a form which may turn out hereafter to be nothing more than an error of the dictionary-maker. In the languages where I am from personal knowledge of them protected to a certain extent from this risk, I frequently find methods of spelling in dictionaries which do not at all tally with my own experience, or with the method in which I have seen the words written by natives of education and intelligence; and this fact throws a haze of doubt round very many forms for which I have no better guide than the dictionary. In fact, no man ought to attempt to write a dictionary whose ear is not gifted by nature or training with the power to distinguish the minutest shades of sound. Moreover, the hard and fast lines drawn by the Devanagari alphabet, and the imperfectness of the Arabic character as a vehicle for the expression of Aryan sounds, make it impossible for the purely native writer to give

indications of dialectic varieties of utterance. The ten vowel symbols of the former are in many cases inadequate to the task, and in the Arabic character there is hardly any provision at all for anything beyond the simplest vowel-sounds, and it is hard to see how any diacritical marks could be introduced into either alphabet which should be at the same time in keeping with their natural characteristics and readily intelligible to the reader. Those few that have from time to time been suggested fulfil neither of these essential requirements. For the present, then, we can get no further than we have already advanced.

§ 45. When a nexus, or combination of two consonants, is dissolved by the introduction of a vowel between them, it is sometimes found that a short *a* is inserted, sometimes *i*, and sometimes *u*. In giving the name of diæresis to this process, there is a departure from the usual application of the term, but as no diæresis of vowels can take place, owing to the abhorrence of the hiatus in Sanskrit, no confusion can arise. If Sanskrit were written in Roman characters, the term diæresis might be applied to the custom of writing ऐ and औ as अइ and अउ respectively, which is not uncommon in the modern languages, because this proceeding would be expressed by saying that *ai* and *au* were written as *ai* and *au*; but keeping to the native character, it appears that this is merely a careless way of writing, and does not affect the pronunciation; thus, in old Hindi कैलास is written कइलास, and even कयलास, but it is in all cases spoken *kailās*; so also we have जौं, जउं, and जवं, all alike sounding as one syllable *jaun*; कौन, कउन, and कवन, all *kaun*. This, therefore, demands no special investigation, though the fact is one useful to be known to those who may have to read old Hindi manuscripts. Thus, the line from Chand—

पूजीय गवरि संकर मनाय ॥

Book xx., 33.

“Having worshipped Gauri, having revered Sankara,”

must be read "*pūjīya gauri* (not *gavari*) *sankara manāy*," as the metre shows.

Leaving this question, then, as unimportant, and passing on to the insertion of the vowel between the two members of a split nexus, we have to endeavour to discover, first, what is the rule which determines whether the vowel to be inserted shall be *a*, *i*, or *u*; secondly, whether it is possible to insert a long vowel, *ā*, *ī*, or *ū*; and, thirdly, whether the insertion of *e*, *o*, *ai* or *au*, can ever take place.

(1.) The most usual proceeding is to insert *a*.

Skr. भक्त "devotee," H. भगत, and so in all.

Skr. रक्त "red," H. रक्त, रगत, in all.

Skr. कल्प "rite," H. कलप.

Skr. जन्मन "birth," H. जनम, P. *id.*, so in all in speaking, though written जन्म.

Skr. धर्म "religion," H. धरम, ditto.

Skr. यत्न "endeavour," H. जतन, ditto.

Skr. रत्न "jewel," H. रतन, ditto.

Especially when *r* is the last letter of the nexus, as नक्षत्र, H. नक्ष्तर, and so in all; Skr. योक्त्रं and याचं "a yoke," G. जोतर; धौचं, G. धोतर, P. *id.* Also when it is the first letter, कर्म = Old H. करम, कर्ण = करन, पर्व = परव, in all except S.; स्पर्शनं = परसना, H., P. कार्य्य = कारज.

With ल as the last member:

Skr. स्लाघा "praise," H. सराहना, P., S. *id.*

Skr. क्लेश "trouble," H. कलेस, P. कळेस.

The use of *i* is less frequent. Instances are—

Skr. क्लेश "trouble," S. किलेस, M. किलस, किलोस.

Skr. स्त्री "woman," तिरिया, P. तिरया, O. तिरी, and vulgo तिळा.

Also the vulgar M. corruptions गिराण "an eclipse," for ग्रहण; गिर्हा for ग्रह and its compounds गिर्हदक, गिर्हाप्रळ, and गिर्हेपूजन.

Sindhi, however, exhibits its fondness for *i* in this particular also. Thus, we have **पिर्जा**, **पिरिति**, **पिराणी**, **पिर्कार**, **पिरोजनु**, **पिरी**, **मिसिर**, **भिर्मु**, for **प्रजा**, **प्रीति**, **प्राणी**, **प्रकार**, **प्रयोजन**, **प्रीय**, **मिश्र**, **भ्रम**, and many others. So also Panjabi has **पिरतपाल**, **पिरतबिंब**, **पिरथमे**, **भिराउ**, for **प्रतिपाल**, **प्रतिबिम्ब**, **प्रथमे**, **भाता**, and the like. In many of these instances the splitting of the nexus, and the consequent introduction of a vowel, has had the effect of suppressing the vowel following, as in Sindhi *pirjā* for *pirajā*, for *prajā*; or the following vowel if long is shortened, as in *piriti* for *pirīti*, for *prīti*; or weak letters drop out, as in *pirojanū* for *piryojanu*, for *prayojana*. In the cases cited from Panjabi there has been elision as well as insertion, for the words must be pronounced *piratpāl*, *piratbimb*, *pirthame*; so that not only has an *i* been inserted between the *p* and *r*, but the final *i* of the preposition *prati* has been elided, and in the last word the insertion of *i* is counterbalanced by the elision of the *a*.

Just as the Sindhi and Panjabi have recourse to their favourite *i*, so do Bengali and Oriya to their *u* (see §§ 32, 33). Thus, B. **अगुन** from **अग्नि**, O. **पुतुरा** from **पौत्र**. This *u* is, especially in Orissa, pronounced so lightly and softly that to a foreigner's ear it is hardly, if at all, audible. Thus, we find Sanskrit **शुक्त** written in Oriya in three ways, **शुक्ता**, **शुकटा**, and **शुकुटा**, but it would ordinarily be pronounced in the last way of the three. **मूर्ख** is in O. **मुखि**; **सपुडिया** "a snake-catcher" = Skr. **सर्पहार**, where the other languages have **सपियारा**, etc. **उष्मन्** "heat," O. **उषुन**, here probably owing to the labial character of the **म**, which has been elided.

(2.) With regard to the insertion of a long vowel, the instances are very rare, and are only to be looked for in the very lowest class of words, which the vulgar have distorted and twisted out of all shape. Marathi affords some examples, as **जुगूत**, Skr. **युक्ति**; **हखष**, Skr. **हर्ष**; **डकूम**, Arab. **حُكْم**; **चकीर**, Skr. **चक्र**; **लबूद**, Skr. **लब्ध**; **रेशीम**, Pers. **ریشم**; **लगीन**, Skr.

लम्, in the sense of "marriage"; वरीस, Skr. वर्ष, H. बरस, but Pr. वरिसो, वरिङ्ग. I have not noticed examples in the other languages, and it would seem to be a peculiarity of Marathi to lengthen the vowel of final syllables, as we saw in §§ 41, 42. It is difficult to fix any rule for the vowel to be inserted—it is at one time *i*, at another *u*, without any special reason derivable from the character of the adjacent vowels or consonants. In *jugūṭ* and *reshīm* we have, it is true, a labial vowel following a labial, and a palatal following a palatal, respectively, but no reason is apparent for inserting *u* in *harūṣh* and *i* in *lagīn*. Probably vulgar caprice, or a habit of rhyming with some other word, is to be charged with these peculiarities. That they rest on no intrinsic law of development is perhaps evident from the fact that Aryan and Semitic words are alike corrupted.

In H. लूका, from Skr. उल्का, a similar process may be supposed to be in operation, but I am disposed to regard this as simply an inversion of the letters ल and उ.

(3.) The diphthongs do not ever appear to be inserted between two consonants; in fact, their extreme length would render such a proceeding almost impossible.

It results, then, from the above remarks, that diphthongs are never inserted; long vowels very rarely, and then only in certain popular corruptions; so that the case rests with the three short vowels. It would at first sight seem most consonant to the genius of these languages to insert *a* after gutturals, *i* after palatals, *u* after labials, or even before letters of those organs respectively. Vararuchi, as usual, is here vague, and merely strings together a number of instances without any attempt at making a definite rule. His Sūtra iii. 60 is perhaps not open to this objection, as it lays down that when two consonants forming a nexus suffer disjunction, the former of them having no vowel of its own, takes the same vowel as the latter, e.g. *klišṭa* = *kiliṭṭham*, *ślišṭa* = *siliṭṭham*, *ratna* = *raṇa* (through

ratana), *kriyā*=*kiriā*, *śāṅga*=*sāraṅga*; but he immediately afterwards (iii. 62) gives a list of words in which this rule is not observed; these latter are rather more numerous than the former. They are *śrī*=*sirī*, *hrī*=*hirī*, *kṛīta*=*kirīta*, *klānta*=*kilanto*, *kṛīṣa*=*kilesa*, *mlāna*=*milāna*, *swapna*=*sivino*, *sparsa*=*phariso*, *harsha*=*hariso*, *arha*=*ariho*, *garha*=*gariho*.

In the first three of these the rule is so far kept that the inserted vowel, though short, is of the same organ as the following vowel, and the same may be said of *kilesa*. In the next Sūtra (63) we have *kṣhmā*=*khamā*, *ślāgha*=*salāha* (though *silāha* is also found), and in S. 65 *padma*=*paūma* (*paduma*), *tanvī*, *laghvī*,= *tanvī*, *lahvī*. The labial *m* perhaps accounts for the *u* in *paūma*, and in the other two words; as also in *jīā* for *jyā* we have merely a solution of the semivowel into its corresponding vowel, and not an insertion at all.

May it not be that the real solution of the question rests in the comparative lightness and heaviness of the vowels themselves? Where the syllables following the divided nexus are not of any great length and weight, the natural tendency to insert a vowel similar to that borne by the nexus when yet undivided can have full play; but when the following syllables are long and heavy, the lightest of all the vowel-sounds is preferred, and thus we get *kilanto*, instead of *kalanto*, from *klānta*; while in *śrī*, *hrī*, the usual, and so to speak congenial, insertion of the *i* is practicable. The question lies entirely between *a* and *i*; *u* is never used in this respect, unless there is some labial influence at work.

If this be accepted as the law for Prakrit, it may be transferred to the modern languages also, due allowance being made for the disturbing element of provincial peculiarities, such as the fondness of Sindhi for the *i* sound, and of Bengali and Oriya for the *u*. The examination of this class of words will also be much complicated by the extreme laxity of writing and pronunciation, whereby *a*, *i*, and *u*, become in unaccented

syllables so mixed up that it is often hard to tell which is really uttered.¹

§ 46. Elision.

(1.) The elision of initial vowels, or, as it is called by grammarians, aphæresis, occurs in the case of words which are compounded with the prepositions अति "beyond," अधि "over," अनु "after," अप "off," अपि "on," अभि "towards," अव "down," उत् "up," उप "below." Although all of these words, except *abhi*, bear the accent on the first syllable in Sanskrit, still we may justifiably conjecture that the vulgar accentuated them on the last syllable. In Greek the corresponding prepositions *ἀντί, ἀνά, ἀπό, ἐπὶ, ἀμφὶ, ὑπό*, are all oxytone, and perhaps if the Sanskrit prepositions were allowed to stand alone so frequently as the Greek do, they also would show themselves to be oxytone; but standing as they do almost always as inseparable prefixes to verbs and nouns, they fall under the influence of the tendency to throw the accent as far back as possible, which appears to be characteristic of Sanskrit. The frequency, however, with which they reject their initial vowel is hardly compatible with the supposition that this vowel was, in popular usage at least, strongly accented.

In classical Sanskrit some examples are found of this rejection of the initial, especially in the case of अपि, such are पि, पिधानं, पिनङ्ग, पिप्पु, for अपि, अपिधानं, etc.; वतोक for अवतोक; धी for अधिया; नूपुर for अनूपुर (perhaps from अनु + उप + वर for वलय), and others.

By the application of this process to the modern languages,

¹ Some violent anti-Urdu writers in the north-western provinces, whose zeal outruns their knowledge, ascribe this neglect to distinguish between the three short vowels to the introduction of the Arabic character in our courts. They forget, or are possibly not aware, that this confusion exists in the writings of the earliest Hindi poets to even a greater extent than it does in modern times, when, owing to the more general study of Sanskrit, people are more careful about their spelling than they were six centuries ago.

some very curious etymologies have been brought to light, by which several words whose origin has hitherto defied detection are successfully affiliated to Sanskrit. Thus :

Skr. अभ्यन्तरे "inside," H. भीतर, B., M., O. भितरि, G. भितर.

Skr. अभ्यर्ष "near," H. भिडना "to approach," भीड "a crowd," and so in all.

Skr. अभ्यञ्जन "anointing," H. भीजना "to be wet," M. भिजणें, G. भिजवुं, S. भिजयुं. There is another form of this word in most of the languages, whose root terminates in ग, as H. भीगना "to be wet," भिगाना, भिगीना "to wet," G. भिगवुं, which may perhaps be referred to the passive participle अभ्यक्त. All this group of words may, however, with equal probability be derived from अभिसेचन, अभिषेक "wetting," by elision of the sibilant. In either case there is no doubt about the *abhi*.

Another strangely contracted and corrupted set of words is H. बुताना and बुझाना "to extinguish a light," with their respective neuters बुतना and बुझना "to be extinguished." These are derived from Skr. अभ्युत्तेजयति. In Saptas. 266 occurs the form अब्भुत्तेअन्तीए (= Skr. अभ्युत्तेजयत्या) with a varia lectio *abhvuttaattie* (read *abbh°*), from which, by rejection of the initial *a*, and a very anomalous absorption of the *bh*, we get a root बुत्तय°, whence बुताना. The parallel form बुझाना is explainable on the supposition that in some other dialect of Prakrit the double त्त was elided and the *j* aspirated. Anyhow, these words exhibit considerable irregularity, and have consequently been hitherto reckoned as Desajas. In M., B., and O., the word is बुजान with the lenis *j*. Perhaps the aspirate in H. arose from the existence of the word बुझाना "to explain" (बुध), with which it was confounded by the vulgar. The S. विसाइणु, उझाइणु, and विसामणु, are still further modifications, the second of which appears to be from उत्तेज, without the *abhi*.

Skr. अध्वचनं "overlooking," H. झांकना "to peep," G., P. *id.*, B. झांकन.

This derivation rests upon the fact, to be demonstrated in Chapter IV., that **थ** passes into **झ**. From this consideration it may be deduced that a great number of words beginning with **झ**, which some writers put down wholesale as non-Aryan or Desaja, are really developed from Sanskrit words beginning with *adhi*, or before a vowel, *adhy*; thus, **झाडना** "to sweep," in all but B. and O., which have **झाँटना**, is for **झडाना** (compare **मारना** for **मराना**, **बालना** for **जलाना** = **ज्वलयते**), softened from **झटाना**, a trace of which stage remains in B. **झाँटना**. The Sanskrit original appears to be **अधि**, with the causal form of **अट** "to go," so that **अध्यटयामि** would mean "I cause to pass over" (a broom or brush understood). So the obscure word **झरोखा** "a window," is probably for **झलाखा**, from **अधि** "above," and **लच्** "to see"; windows in the East being always high up in the wall. **झांप** "a mat-covering," and **झांपना** "to cover," are from Skr. **पिधानं**, from **अपिधा**, where an inversion has taken place, giving **धानपि**; the word occurs in all but S. The above examples have been adduced because they seem tolerably well supported. The rule may, however, be pushed too far, and care must be taken lest examples in which **झ** is, as is often the case, derived from a Skr. **च**, through **छ**, be mixed up with those under this head.

अपि gives several well-proved cases, of which the following is one: Skr. **पिनद्ध** (**अपि**) "clothed," Pr. **पिलन्धनं**, O. **पिधिंवा**, B. **पिन्धिते** "to clothe"; the cognate words in the other languages are derived from another part of the verb, **पिनहनं** (the verb is **नह्** with **अपि**), by inversion; thus, H. **पहिना** for **पिनहना**, P. *id.*; but H. has also a form **पहिरना**, which is followed by S. **पहरणु** and G. **पेहरवुं**. This is, I think, entirely a different word, and comes from **परिधानं**, by the usual process of resolving the **ध** into **ह**, so that we get **परिहानं**, whence by inversion **पहिराना** "to clothe." This verb having a causal form, a neuter form **पहिरना** was, as usual, created in the sense of "to be clothed," "to wear clothes."

अपि "alone," becomes in Pr. बि, and in H. भी, meaning "also," "even," where there is probably an emphatic हि added, so that बिहि = भी.

अनु loses its initial in Panjabi, and appears under the form of नु or नुं, as the sign of the accusative case.

The case of अव is rendered difficult by its close similarity to वि, अपि, and अप. The *p* of the two last is so constantly softened to *b*; while the distinction, on the other hand, between *b* and *v* is in all but M., G., S., and P. so entirely ignored, and in them even, through ignorance, so frequently misplaced, that in the case of words beginning with *v* or *b* we cannot tell whether they have sprung from *api*, *ava*, or *apa*. With regard to *vi*, the carelessness in the employment of the short vowels adds an element of difficulty; thus, Chand uses बगसना "to blow," or "expand" (of a flower), which, however, is from विकसनं, not अव°; so also बखाना "to declare," "expound," is from विख्यानं, not अव°. ¹ Genuine cases of the use of this preposition are the following: Skr. अवचाणं "rescuing," H. बचांना, M. वचाविणें, B. बाचान, O. बचाइबा, etc.; अवस्थानं "abode," H. बठान, G. बथाणियो, M. बठाण. In the former case *tr* has been treated as *त्य*, and passed by the natural process into *च* (see Chapter IV., § 85). It might be thought that as the prepositions mentioned above have all separate well-defined meanings, and vary the original idea of the verb according to those meanings, there would be no difficulty in determining by this test which of the prepositions was the parent of the modern word. But unfortunately so many metaphorical and secondary senses have crept into use that this method of fixing the derivation becomes quite impossible; and as the gap in the history of our languages prevents us from tracing the gradual alteration in the sense of words, any effort to settle this difficult and obscure point would be at present premature and unsuccessful.

¹ See also § 36, where non-initial *ava* is contracted into *o*.

Elision of उ in उप may be illustrated by the case of उपविष्ट "seated," which becomes in Prakrit उवविट्ठो, and उवरट्ठो, whence H. बैठा "seated"; from this word has been formed a verb बैठना "to seat oneself."¹ In those languages which admit of the formation of different parts of the verb from the corresponding tenses of the Sanskrit a double form exists. Thus, G. बेश्वु from वेश्मन्, but p.p. बैठो from विष्ट, where the उप may have been entirely rejected, or the two व absorbed into one ब. Similarly, S. विहणु, p.p. वैठो, to which may be added Kashmiri विअह, the past tense of which is not given in the meagre article from which I have taken it. In some rustic dialects of Hindi a form बैसना may be heard which is = उवइसनं = उपवेशनं. उ in उद् is elided in Skr. उन्नार "belch," H. डकार, P., S., G. *id.*, where M., B., and O. make ढेंकर, ढेकार, and ढेकुर, respectively. I am not quite satisfied with this derivation, as *udgāra* also means "spitting," in which sense it becomes उगार, ओगार, and the like; perhaps डकार and its fellows may be mere onomatopoeic words, or even non-Aryan.

Elision of the initial अ occurs also in the following words:

Skr. अरघट्ट "a well-wheel," H. रहट, M. रहाट, G. रेंट.

Skr. अरण्य "forest," Pr. रण, Old H. रंज, H. रन, S. रिज, रिणु, G., M. रान.

Skr. अरत्नी "elbow," M. रेंटा, "a shove with the elbow," रेंटणें "to elbow."

Skr. अतसी "linseed," Eastern H. तीसी, B. तिशी, O. तेसी.

Skr. अपूप "a cake," H. पूप, पुपला, M., O. *id.*

¹ Not, as is generally stated, "to sit"; the difference is that the H. word *baiṭhā* expresses the act of passing from a standing or lying into a sitting posture; thus, "Sit down!" or "Take a seat!" is बैठो, but "He sat there all day" is वहां दिन भर बैठा रहा, not बैठा; *baiṭhā rahnā* means to remain sitting, or, as we use the word, "to sit." The same distinction prevails in all the languages where this word occurs.

Instances of इ are hardly to be expected. I have not noticed any. Very few words begin with this letter in Sanskrit, and those that do are short words with the accent on the first syllable, so that elision is not likely to occur. The words इति and इव lose their first letter in some Prakrit works, and become *titi* and *vvi* or *vvia*, but neither of them are in use in the modern languages. The S. words रिञ्ज and रिणु given above may possibly be derived from S. इरिण, instead of from अरिण, though I prefer the latter, looking upon the *i* as another instance of the preference of S. for that sound.

Instances of उ:

Skr. उदुम्बर "fig-tree," B. डुमर, O. डुमरी.

Skr. उल्का "flame," H. लूका "burning grass," though some would derive this from Skr. लोक् "to shine;" and even if it be not so, it is rather an inversion than elision.

ए is elided in एरण्ड "castor-oil tree," H. रेण्डी; here again we have a case of inversion.

(2.) Medial vowels do not often appear to suffer elision singly. That is to say, a vowel alone seldom disappears; when it is elided, it is almost always in consequence of the consonant to which it is attached going out, and this class of cases will be more appropriately considered under the head of consonantal elision. Perhaps this fact is due to the peculiar structure of Sanskrit words; in which two vowels cannot come together without the intervention of a consonant. In Latin, where two vowels frequently occur together, the dropping of one of them becomes possible; thus, *meos, tuos, suos*, become in Spanish *mis, tus, sus*, when they precede a substantive, as in *mis amigos* = *meos amigos*; but where they stand alone the double vowel is retained: thus they say *su padre y sus hermanos* = *suum patrem et suos germanos*, "his father and his brothers"; but *hermano menor mio* = *germanus minor meus*, "my younger brother"; *esta albarda es mia*, "this saddle is mine," with emphasis on the pronoun. The French drops the first vowel in the singular,

making *mon*=*meum*, *ma*=*mea*, but the second in the plural *mes*=*meos*, *meas*. This instance shows that the force of the accent alone preserves the second vowel in Spanish, but not in French, and leads to the explanation of a frequently recurring case in Hindi, which amounts to a regular law of the language, namely, that in the formation of the infinitive from the Sanskrit noun in *-anam*, the short *a* of the penultimate invariably drops out; thus, from *kāraṇam*, *māraṇam*, *rāhaṇam*, come *karnā*, *mārnā*, *rahnā*. Here the accent in Sanskrit is on the root syllables *kar*, *mār*, etc.; and as the final *-am* gets changed, by a process to be explained hereafter, eventually into *ā*, the weight of the two syllables on either side of it—the one by virtue of its accent, the other by its length—fairly crush out the middle *ā*, which is both short and unaccented. This elision is also common in Panjabi, but not entirely so in the other languages, where the *a* is sounded, though so rapidly as to be almost imperceptible to European ears.

The same takes place in Hindi occasionally in cases where the final *a* of a Sanskrit word is lengthened to *ā*; thus, from दुर्बल *durbala* comes H. दुबला *dublā*, not *dubalā*; or where a heavy termination has taken the place of a light one, as from विद्युत् *vidyut*, H. बिजली *bijlī*, not, as in some other languages, *bijuli*, or *bijālī*.

(3.) Cases of elision of a final vowel are very common. The final short *ā* of all Sanskrit words is elided unless it bears the accent, in which case it is generally lengthened to *ā* in Hindi. (See § 20.)

Other elisions of final vowels depend upon the rules of formation of the base of nouns, and are structural rather than phonetic. The rule holds good of *i* and *u* as well as of *a*. All three vowels are commonly dropped when final and unaccented, and the modern languages in a great majority of instances make their nouns to end in a consonant. Thus:

Skr. पकटि "pakar-tree," H. पाकड़.

Skr. बाहु "arm," H. बांह.

Skr. विपत्ति "misfortune," H. विपत.

Skr. व्यक्ति "person," H. बिकत.

Hindi and Panjabi adhere to this rule firmly; the other languages admit of some exceptions, which will be discussed in their proper place. It must be remembered that in all the languages except B. and O. words are often written with two separate consonants instead of a nexus, as in the case of बिजली, which would be more accurately written बिज्ली, but this is mere carelessness, and will not mislead any one who has heard the language spoken.

The final vowel, together with the consonant which precedes it, and sometimes even the vowel preceding that again, is elided in the case of words ending in *aya*.

Thus, Skr. आलय "abode," becomes आल् in compounds, as H. सुसराल = Skr. श्वशुरालय "father-in-law's house"; किन्नल "whore," = Skr. कीयालय. More frequently, however, *ālaya* becomes *ālā*; the *y* passes into *v* and *u*, and is finally elided: the first *a* being lengthened, as in दिवाला, शिवाला, हिमाला, अंबाला, पतिआला, for दीपआलय, शिवालय, हिमालय, अम्बालय, पत्यालय.

Other instances are:

Skr. वलय "bracelet," H. बल, M. वळ, G. *id.*, P. बळ, S. वल्, O. बलि.

Skr. आश्रय "refuge," H. आसरा, S. आसर, आसिरो, M. आस्ता, G. आसरो.

Final *ā* is elided in many Sanskrit feminines, as—

Skr. निद्रा "sleep," H. नीद, M. नीद, नीज, P. नीद, S. निडु.

Skr. द्राक्षा "vine," H. दाख, P. *id.*, S. डाख.

Skr. दूर्वा "a grass," H. दूब, B., O. दुब, दूब.

Skr. छाया "shadow," H. छां, P. *id.*, S. छांव, छां.

Skr. परीक्षा "examination," H. परख, and so in all.

Skr. वार्त्ता "speech," H. बात, G., P. *id.*, S. बाति.

Skr. वल्गा "rein," H. बाग, and so in all.

Skr. जिह्वा "tongue," H. जीभ, and so in all.

Final *i* is also elided in the feminines in इनी, as—

Skr. गर्भिणी "pregnant," H. गर्भिन, P. गर्भण, गरभण, G. गर्भण,

M. *id.*, B. गर्भिण, vulgo गर्ब.

Skr. भगिनी "sister," H. बहिन (see §. 53).

Numerous feminines of trades are formed in this manner, even in cases where it would be hard to find the termination *ini* in Sanskrit; thus :

H. धोबिन "washerwoman," from धोबी "washerman."

H. चमारिन "shoemaker-woman," from चमार "shoemaker."

H. सोनारिन "goldsmith's wife," from सोनार "goldsmith."

Sindhi does not entirely elide the ई, but shortens it to इ. M. lengthens the first *i* (see § 41). The other languages elide the *i* entirely, except of course in Tatsamas. Final *u* is not very common in Sanskrit, and where it occurs it does not suffer elision like the other long vowels,—at least, no instances have come to my notice. Such words as भू "earth," भ्रू "eyebrow," being monosyllables, are from their nature incapable of elision.

In the case of वधू there are H. बह, B. बउ, M. वड, O. वड, P. बोह, S. वह, O. वड, where the *u* is retained, though in some languages in a shortened form. In most, however, the word is pronounced more like *boh*, or *bohū*.

E is elided in a class of words derived from locatives in Sanskrit, and which are used adverbially by the moderns. Thus :

Skr. पास्ये "beside," H. पास, P. *id.*, but on the contrary M. पासो, पासून (which are independent Marathi formations from a noun पास, and therefore post-Sanskritic), G. and S. पास.

Skr. निकटे "near," H. निकट, and so in all. It is to be observed, however, that these words may also come from the nominative निकटः of the Skr. adjective.

Skr. अभ्यन्तरे "within," H. भीतर (see Part I. of this section).

Skr. सङ्गे "with," H. संन, P., G. *id.*, S. सां, but M. संगे, and O. संगे.

Skr. नीचे "below," M. नीच, B., O. *id.*, but all the rest नीचे.

Skr. तले "beneath," M. तल, तळ, G. *id.*, O. तळ, but also तळे, H. तले.

§ 47. It remains to point out the treatment of vowels which are brought into contact by the elision of an intervening consonant, a practice which is extremely frequent in the Prakrits. Vararuchi is, as usual, unsystematic on this point. The text from which Cowell has edited his work is confessedly corrupt, so that there are unusual difficulties in the way. The general rule may, however, be laid down that the two vowels are allowed to stand in contact without undergoing the process of Sandhi. Thus:

Skr. यमुनातटा "bank of Jamnā," Pr. जउणअडं or जउणाअडं.

Skr. नदीश्रोतस् "current of a river," Pr. णइस्रोत्तो or णईसोत्तो.

Skr. कर्णपूर, a tree so called, Pr. कणउरं or कणऊरं.

Here the long vowel of the Sanskrit is sometimes shortened, but we cannot build any theory on this fact because so much of Prakrit literature is in verse that changes in quantity are in a majority of instances merely made *metri gratiā*. Vararuchi's instances are taken from compound words only, but a large number may be adduced from other sources, where elision has taken place in a simple uncompound word, and where in consequence the influence of the laws of euphony might be expected to be more apparent. In the following list the order of the vowels is followed throughout.

(1.) *a + a*. Pr. *kaḍaa, kaṁba, gaana, jaalachhi, paa, paavi*, for Skr. *kataka, kadamba, gaganā, jayalakshmi, pada, padavi*.

(2.) *a + ā*. Pr. *aāla, paāvai, laā, haāsai*; for Skr. *akāla, prajāpati, latā, hatāśāyā*.

(3.) *a + i*. Pr. *kaï, gai, jai, päirikka, mairâ*; Skr. *kavi, gati, yadi, pratirikta, madirâ*, and in the 3rd pers. sing. of the present tense *parasmaipada* of all verbs.

(4.) *a + i*. Pr. *ñat, paiva, bhaavañ, sat, Pavvat*; Skr. *nadi, pradipa, bhagavati, sati, Pârvatî*.

(5.) *a + u*. Pr. *chajjâmâ, paûra, maûla, laû*; Skr. *chaturyâ-mâ, prachura, makula, laghu*; and derivatives of *chatur=chajj*, universally.

(6.) *a + û*. Pr. *maûha, maûra*; Skr. *mayûkha, mayûra*.

(7.) *a + e*. Pr. *kae, jae, vachhae, tanûlae*; Skr. *krite* (through *kade*), *jagati, vrajate* (?), *tanukâyate*; and in 3rd pers. sing. present of *âtmanepada* and passive verbs in general.

(8.) *a + o*. Pr. *uao, gao, paosa, paohara*; Skr. *udakah, gajah, pradosha, payodhara*.

(9.) *â + a*. Pr. *âara, âava, kâa, gâai, chhâa*; Skr. *âdara, âtapa, kâka, gâyati, chhâya*, at the end of a compound.

(10.) *â + â*. Pr. *ââsa, chhââ, jââ*; Skr. *âkâsa, chhâyâ, jâyâ*.

(11.) *â + i*. Pr. *âhijâi, jâi, jampiâi*; Skr. *abhijâti, jâti, jalpîtâni*.

(12.) *â + i*. Pr. *gât, râi*; Skr. *gâti, râti*.

(13.) *â + u*. Pr. *âû, âûla; âyus, âkula*.

(14.) *â + e*. Pr. *vâei, lâei, pahiajâe*; Skr. *vâdayati, lâgayati, pathikajâyâyâh*. The forms *âe* and *âi* are extensively employed instead of the Sanskrit forms *âyâ, âyai*, and *âyâh* of the instrumental, dative, and genitive of feminine nouns in *â*.

It is perhaps unnecessary to go through the whole of the long array of vowel combinations possible in Prakrit. From the above instances it will be clear to the reader that any two vowels may thus be brought into contact without being forced to combine according to the Sanskrit laws of Sandhi. In looking over the above list it will be noticed that the combinations in which a short vowel precedes a long one are rarer than those in which the long vowel holds the first place. This leads to a second rule of Vararuchi's, namely, that one of two

vowels so brought into contact may be elided, in which case, when a nexus follows, the elided vowel is always the first, and never the second. Thus, he gives as illustrations certain alternative forms, in one of which elision occurs, in the other both vowels are retained. Thus:

Skr. राजकुल, "royal family," Pr. *rāṭūlam* or *rādūlam*.

Skr. तवाद्धे "half of thee," Pr. *tuhaddham* or *tuhaaddham*.

Skr. ममाद्धे "half of me," Pr. *mahaddham* or *mahaaddham*.

Skr. पादपतन "falling at the feet," Pr. *pāvadaṇam* or *pāvadaṇam*.

Skr. कुम्भकार "potter," Pr. *kumbhāro* or *kumbhādro*.

In these instances it is naturally the long vowel which is retained, whether it precede or follow. Such elision is, however, rare in Prakrit, which does not as a rule shrink from the juxtaposition of any number of vowels. Three vowels occur, for instance, in *vāai*, *āriāi*, *chōriāi*, *līhiāe*, *bhīāie*, *pīāama*, *uāa*, *māuā*, and many other words; and even four vowels are not uncommon, as in *pasāīāe*, *tanūāāi*, *tanūāāe*, though from the nature of the case these are less frequent than the others.

I have dwelt at some length on this point in order to bring out in fuller relief the peculiarities of Prakrit in this respect, and in order to show that the modern languages do not follow the lead of the Prakrits in every detail. It is a mistake to suppose that the living vernaculars are merely further developments of Prakrit, formed on the same principles and carrying out the same laws. On the contrary, in post-Prakritic periods many new principles, some of them quite opposed to those in vogue in Prakrit, have been introduced, and have largely influenced the common speech. In this very particular of the hiatus there is much divergence from Prakrit rules. I do not say that the modern languages in any way abhor the hiatus—far from it; but in respect of that particular form of hiatus which arises from the elision of a consonant, they do not generally leave the two vowels side by side without further

euphonic changes. These changes do not, it is true, regularly follow the Sanskrit laws of Sandhi in all cases, though they not unfrequently do so, but a change or amalgamation of some sort does in the majority of instances take place.

As a general rule for the modern languages the following may serve :

a. When the two vowels are homogeneous, they coalesce with the corresponding Guṇa or Vṛiddhi vowel.

β. When they are heterogeneous, they either remain side by side, or are separated by an interposed consonant.

By "homogeneous vowels" are meant such as in Sanskrit are capable of combining, as *a + i*, *a + u* ; by "heterogeneous," such as will not combine, as *i + a*, *i + u* ; the former combine into *e* and *o*, but the latter will not combine; the first of the two is hardened into its semivowel, as *ya*, *yu*.

In the first of these two rules the Sanskrit system is by no means regularly followed ; thus, *makula* becomes Pr. *maūla*, and should in H. consequently become by coalition of the vowels *mol* मोल ; it does, however, become *maul* मौल.

The subject is treated as regards the consonants in Chapter III., § 53 (3.), and numerous examples will be found there. The following may be noticed as illustrations of the above rules :

a. *nakula*, Pr. *ṇaulo*, G. *noliyun*, S. *noru*. Here the other languages insert an *e*, as H. *newal*, B. *neūl*, and this *e* being dissimilar to the *u* which follows cannot coalesce with it.

bhagini, Pr. *bhaiñi*, P. *bhain*, S. *bhenu*.

śata, Pr. *sao*, H. *sau* (through a shortened form *saū* सः).

ghāta, Pr. *ghāo*, H. *ghāu*.

β. *pitā*, Pr. *piā*, H. *piū*.

sūchi, Pr. *sūt*, H. *sūt*.

pipāsā, H. *piyāsā* ; insertion of *y* to prevent the hiatus.

kokila, Pr. *koilo*, H. *koil*, but G. *koyal*, O. *koyil*.

Sometimes an irregular process occurs, as where from सुगन्ध we get H. and P. सौंधा, through Pr. सुञ्चंध. Here $u + a$ are heterogeneous, and could not coalesce; the result, *au*, must have arisen from inverting the vowels of the Pr. form, and saying *saündha*, instead of *suandhā*.

A short vowel following a long one is generally dropped altogether, as in *dūnā* for *dūūna*, Skr. *dwiguṇa*; *ronā* for *roanā*, Skr. *rodanam*. In the case of verbs like *ronā* the process is facilitated by the ease with which the penultimate *a* in nouns of the form *rodanam* goes out, owing to its position following an accented and generally gunatized syllable.

Many irregularities must of course be looked for in a process like this, where the modern languages have in a great measure abandoned the earlier phonetic rules and followed the changes incidental to a wide use of this class of words by the common people. As a provisional rule, however, and as one which appears to point in the right direction for future more extensive inquiry, that above given will I hope prove correct.

There is not much, after all, as far as investigations have yet been made, either very striking or very important in the consideration of vowel changes. The principal interest of the phonetics of the Indian languages is to be found in the consonantal changes, to which I now proceed.

CHAPTER III.

CHANGES OF SINGLE CONSONANTS.

CONTENTS.—§ 48. GENERAL REMARKS: POSITIONAL AND ORGANIC CHANGES.—
§ 49. POSITIONAL CHANGES—INITIAL CONSONANTS.—§ 50. MEDIAL CONSONANTS.
—§ 51. (1) RETENTION.—§ 52. (2) SOFTENING OF TENURES TO MEDIE.—§ 53.
(3) ELISION.—§ 54. LAWS OF THE THREE PROCESSES.—§ 55. FINAL CON-
SONANTS.—§ 56. ORGANIC CHANGES—GUTTURALS.—§ 57. RELATION OF
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FURTHER TRANSITION OF CEREBRALS INTO *l* AND *l̥*.—§ 61. MODIFICATIONS AND
CHANGES OF SEMIVOWELS, (1) ल.—§ 62. SEMIVOWELS, (2) य.—§ 63. SEMI-
VOWELS, (3) र.—§ 64. SEMIVOWELS, (4) व.—§ 65. THE NASALS.—§ 66. THE
SIBILANTS.—§ 67. ह.—§§ 68, 69. THE ASPIRATES.—§ 70. VISARGA AND
ANUSWÂRA.—§ 71. INVERSION OF WORDS.

§ 48. By single consonants are implied those consonants which stand alone in a word, and which being in a measure unsupported are subjected to many and various changes. These changes may conveniently be considered under two classes: First, those whose operation varies with the position of the letter in a word, which are therefore called positional changes; and, secondly, those whose operation is not influenced by position, and which, being chiefly changes from one organ of speech to another, will be called organic changes.

Both classes are sometimes seen in activity in the same word, and their influences are very conflicting and confusing, but there is as a rule much uniformity in the way in which the

whole seven languages undergo positional changes; while in the case of organic changes, on the other hand, the individual peculiarities of the several languages stand out in strong relief. Positional changes are more universal in their application, organic ones more restricted to special instances; the former are based upon general principles, the latter on the various and sometimes irregular developments of provincial pronunciation.

§ 49. Positional changes follow the general principle which rules all the languages of the Indo-European family, and which has been thus concisely stated by Grimm: "Initial consonants retain the grade of each organ in the purest and truest way, medial consonants have a tendency to soften, finals to harden."¹ By the expression "grade" must be understood the two classes of *tenuis* and *mediæ*; and it is thus laid down as a rule that *tenuis* *k*, *p*, *t*, etc., in the middle of a word have a tendency to soften into their corresponding *mediæ* *g*, *b*, *d*; while medial *g*, *b*, *d*, at the end of a word have a propensity to harden into *k*, *p*, *t*. In the Indian languages the rule holds good in the main, and although a great variety of modifications is observable, they can all be traced by careful examination to the operation of this law, either in the exact method stated above, or in the still more advanced developments of it.

Initial consonants remain undisturbed, whether in *Tatsamas* or *Tadbhavas*.

a. In *Tatsamas*, as कमल, कन्या, गृहस्थ, गिरि, चकोर, चन्दन, जीवन, तूरी, मान, मेघ, सिन्दूर, रुचि, हार. Here are instances of *tenuis*, *mediæ*, semivowels, nasals, sibilants, and ह. In fact, from the very nature of *Tatsamas*, which are words in their

¹ *Geschichte d. Deutschen Sprache*, vol. i., p. 251, "Anlaut hält die stufen jedes organs am reinsten und treuesten, inlaut ist geneigt es zu erweichen, auslaut zu erhärten." We have unfortunately no equivalents for *anlaut*, *inlaut*, or *auslaut*. These words, meaning on-sound, in-sound, and out-sound, respectively, are also applied to vowels, but in the passage quoted only consonants are referred to.

pure Sanskrit form, it follows that no change can have taken place, otherwise they would cease to be Tatsamas.

β. In Tadbhavas, as कडाही, कौडी, कोइल, जोंक, तिरछा, नेव, नंगा, मूठ, रोना, लोंग, सूई, हाथ, from कटाह, कपर्द, कोकिल, जलूक, तिर्यञ्च, नेमि, नम्र, मुष्टि, रोदनं, लवङ्ग, सूचि, हस्त, where, in spite of violent changes in the interior of the word, the initial letter remains unaltered. A very large number of these words may be found in every page of the dictionaries of these languages. When initial changes do occur, they are generally found to be due to some organic disturbance in the body of the word, which has exercised a retrospective influence on the initial letter. Such changes are, however, altogether exceptional, and comparatively few in number. The most prominent and common of them will be noticed below. To be omitted from the present section, however, are all those words which in Sanskrit begin with स् and स्त. The former generally appear with an initial फ, the latter with थ or ठ. The aspiration is due to the influence of the sibilant, and, as we are here considering single consonants only, this process does not fall within our present subject.

There are, however, instances where the sibilant forms the first member of a nexus in the middle of a word, and in going out has affected, not only the letter to which it was joined, but also the initial. Thus, Skr. पुष्प "flower," becomes in Pr. पुप्फ, but in Old H. पुङ्गप, and finally फुत or फूप. Skr. कसूरी "civet," S. खथुरी; Skr. वाष्प "vapour," H. भाफ, and the same in P., B., and O., where both letters are aspirated. The form बाफ also occurs in B. and H., and in S., G., and M. it is the only form in use. The Skr. कच्छू "a scab," is perhaps the origin of H. खाज "itch"; also खुजली "a diminutive," where there has been epenthesis of u, as described in § 34; S. खाजी, M. खाजो "to scratch," B. खसु. Skr. कूप "a well," is S. खूह and खुड; Skr. कुसुम "saffron," = S. खुड्डी; Skr. कांस "cough," H., P., and S. खांसी, खांसना, खांसण.

In some cases an aspirate in the middle of a word is thrown back to the initial and amalgamates with it, as Skr. गृह "house," original form गर्ह, still preserved in Kashmiri गरह. This becomes in all the modern languages घर.

Skr. दुहिता "daughter," becomes in Pali धितर and धीतर, and even in Skr. a form धीदा is in use. The word is oxytone, and the coalition of the two short toneless syllables into one is therefore natural. Pr. धीआ, धूदा, H. धी, धीया, P., G. *id.*, S. धिउ, धिय, B. झी, O. झिअ (*jhiō*); the two last forms have arisen from the close connexion between *jh* and *dh*, which, especially when followed by a palatal vowel or semivowel, is very frequent. To the parallel connexion between ज and द may be ascribed the isolated H. form जामाद, Skr. जामाता "son-in-law," where all the other languages have ज, as M. जामात, B. जामाई, O. जुआँई and ज्वाँई, G. जमाई, S. जादो.¹

The Skr. पनस "the Jack-tree," becomes in Pr. फणसो, H. फनस, but in this case it may be assumed that in Skr. also the original form was फणस, derived from फण "the expanded hood of the cobra," to which the leaves of this tree bear a close resemblance. Sindhi has झंगु and झंगली, from Skr. जंगल, in which irregularity it stands alone, unless the name of the Panjab town Jhang be derived from the same, which is highly probable, as it stands in the centre of a vast desert.

Skr. महिष "buffalo," becomes H. भैंसा, fem. भैंस, G. भेंस, B. भइष, O. भयेष. In many parts of Hindustan म्हेंस is commonly used. M. has only म्हेंस, while P. preserves the initial म in मज्झ; so also does S. in मंझ and मेंहि. The form in भ has of course arisen from a corruption of म्ह. The reverse of this process is seen in M. म्हणणें, from Skr. भण "to speak"; similar to it is Pr. भरण "remembrance," for म्हरण, from स्म.

In Prakrit writings changes of initial consonants are more

¹ The Hindi word is borrowed immediately from the Persian داماد, which accounts for the change; Skr. ज often becomes د in Persian through an intermediate ज.

common. The total rejection of an initial consonant occurs with frequency. Especially is this the case in the effeminate dialect of the Saptasāṭaka, where, however, it must be noted that the examples given by Weber, *muhaanda*=*mukhachandra*, *kuḍumvāṭṭhi*=*kuṭumbakṛishti*, *nahaala*=*nabhastala*, are not cases in point, inasmuch as the words *chandra*, *kṛishti*, *stala*, being the last members of a compound, their initial letter is no longer an initial, but becomes subject to the laws which rule medial letters. The supposition that the Prakrit root *achh* is from *gachh* (*gam*), by rejection of the initial, is directly opposed to Vararuchi, who explains it by *as*. In all the passages where this word occurs the context requires that it should be translated by "stay," "remain," "stop,"—precisely the reverse of the idea of *gachh*. The modern languages exhibit two forms of the substantive verb, or perhaps two separate verbs: अस् and अच्च; the latter of which seems to point to अच. But reserving the discussion of this question to a more suitable place, the Magadhī of the Jains, as well as the language of the Saptasāṭaka, presents instances of rejection of initial consonants; thus, *a*=*cha*, *uno*=*punar*, *āḍham*=*gāḍham*, *aūṇā*=*chatur*, and the like. This process is absolutely unknown in the modern languages, and it may be doubted whether it was ever really in vogue even in Prakrit beyond the limits of literary composition.

The softening of initial tenues into mediæ, or, in the case of the labials, into the semivowels, is found to occur in instances where the modern languages retain the letter in its original Sanskrit grade. Thus *vai*=*pati*, *vaā*=*pada*, *vaṇḍu*=*pāṇḍu*, *vatta*=*patra*, *vaḍḍā*=*patākā*. The process appears to have been almost confined to *p*, a letter which, as we shall frequently see in this chapter, is peculiarly weak and liable to change.

On the whole, however, Grimm's law is observed faithfully, and the instances where it is not followed may be regarded as exceptions, in each case of which some special reason exists for

the change; and it may be further observed that the modern languages in no single well-authenticated case follow the Prakrit custom of entirely rejecting the initial or softening it into its corresponding media.

§ 50. It is in medial consonants that the greatest variety of change takes place. They are either retained unaltered, or weakened into softer sounds, tenues to mediæ, mediæ to semi-vowels and vowels, or they disappear altogether. In the latter instance the consonant sometimes carries away with it the following, and sometimes even the preceding, vowel, so that a whole syllable disappears.

In Prakrit it is stated that there are instances of hardening of medial consonants. This is so opposed to all analogy, and so unsupported by the example of the modern languages, that it may be as well to examine the instances adduced before proceeding to inquire into the three regular processes mentioned above.

Weber expresses himself as doubtful whether the instances of hardening found in the Bhagavati be really genuine, or mere errors of the writer of the manuscript. The instances are *jati=yadi* and a whole series of words in which it is dimly and indistinctly conjectured that the corruption of a certain Sanskrit word would have produced a media, whereas it is found in the text with a tenuis. These are not decisive proofs; though ingenious, they are based upon conjecture. *Jati=yadi* is the only *bonâ fide* instance, and that appears to be an error of the scribe, who has a partiality for *t*, and sticks it in where it has no right to be. In Saptasâtaka, too, there are only conjectures; as *dhakkei* for *sthagayati*, where the modern धाकना and झाकना "to cover," seem rather to point to a separate root. It does not follow, because a Prakrit word is interpreted in Sanskrit by a somewhat similar word, that it should be connected therewith: *lukka* is supposed to be either for *lagna* or *yukta*, but there is a

root *luk* which will answer the purpose better than either. From Vararuchi are quoted *vachchai* for *vrajyati*, *ruchchai* for *rudyate*, *chakkh* for *yaksh* (*jaksh*). These are also vague, and the affiliation of the Prakrit words is not certain. Upon the whole, then, it appears that there are only a few instances of this process, and the majority of those few are doubtful, so that no rule can be founded on them. The analogy of the languages is against it; and where the manuscripts are so carelessly written, and the forms of some of the letters differ so much from those in use in printed works as to mislead the reader, it is safer to suppose a mistake in writing than a systematic violation of analogy.¹

§ 51. (1.) Proceeding then to the first class in which a single letter is retained unaltered, we find that च is the most tenacious of all the tenues. We find पचनं, रचनं, वचनं, मोचनं, सोचनं, याचनं, सेचनं, रुचि, in the modern languages, though in Prakrit they all lose the च. Thus, *rañnam* appears for *rachanam*, though it also represents *radanam*, or even *ratna*. The confusion introduced into Prakrit by this omission of consonants renders it very difficult to believe that these dialects were ever really spoken languages.

Vararuchi's rule (ii. 2) is to the effect that the lenes of the four organs, excluding the cerebrals, are elided: but Bhāmaha's comment infers from the use of the word *prāyas*, or "generally," that where euphony is satisfied there need be no elision, and he adduces the following words in proof of his inference: *sukusamam*, *piagamānam*, *sachāvam*, *avajalam*, *atulam*, *ādaro*, *apāro*, *ajaso*, *savahumānam*, for *sakusuma*, *priyagamana*, *sachāpa*, *apajala*,

¹ Even if it be conceded that the instances quoted are real cases of hardening, it must at the same time be admitted that they are too few to establish a rule, and the discussion of them has therefore been shortened in this work, which, as before mentioned, deals only with Prakrit as a secondary subject in so far as it throws some, though often a confused and misleading, light on the modern languages.

atula, *ādara*, *apāra*, *ayaśas*, *sabāhumāna*. But all these words are compounds, and it is observable that there is much irregularity in their case. Sometimes the first consonant of the latter part of a compound is treated as though still an initial, and escapes elision; while in other cases it is treated as no longer an initial, but a medial, and is elided accordingly. The decision seems to depend on the degree of amalgamation attained by the two elements of the compound; in a word which is well known and frequently used the consonant is elided, showing that though a compound it had got to be treated as a single word; but in those words whose two elements have not so coalesced, as, for instance, in occasional compounds, a sentiment of the separate existence of the two words has operated to preserve the initial of the second from elision. Thus, in a common compound like *supurusha*, a word of every-day occurrence, the *p* is elided, and we have *suūriso*; whereas in the less commonly used compounds quoted above the initial is preserved. I do not think euphony has anything to do with it, because *supurusha* is quite as easy to pronounce as *sukusuma*.

Apart from compounds, however, we find instances of retention. Thus, (α) *tenuēs*: *kotuhallāin*, *kapolam*, *iti*, *vatuna*, *sutā*, *āpelo*, *satam*, *samiti*, and a few others, for *kutūhalāni*, *kapola*, *iti*, *patana*, *sutā*, *āptdah*, *śatam*, *samiti*; (β) *mediæ*: *juguchha*, *gagana*, for *jugupsa*, *gagana*, and the like. But these are exceptions. The language of the Bhagavati, like Pali, retains single consonants much more frequently than scenic Prakrit, or works written in imitation of it.

In the modern languages, even in Tadbhavas, retention is to be found; as in—

Skr. चिति “earth,” H., P. क्षिति.

Skr. क्षेप “moving,” खेप, in all.

Skr. जट “matted hair,” जटा, in all.

Skr. जपनं “muttering,” H. जपना, जंपना, M. जाप, जापणें.

Skr. ज्योतिः "light," H. जोत, जोति, S. *id.*, G. जोत, P. जोतना.

Skr. तिलक "sectarial mark," H. टीका, M., B., O. टिका, S. टिको.

Skr. स्थगनं "covering," H. ठगना, and so in all.

Skr. यजमान "a client,"¹ H. जिजमान, in the rest जजमान.

Skr. स्फाटिक "alum," H. फिटकरी, M. फटकी, S. फिटकी, the rest फटकरी or ंडी.

Although these words are classed as Tadbhavas, yet it is observable that they differ very little from the Sanskrit form, and are in many cases modern, though not universally so.

I am disposed to think that a single consonant is more often preserved when followed by a long or accented vowel and preceded by a short or unaccented one, than when the reverse is the case. This supposition will be reverted to when all three forms of treatment have been reviewed, and is introduced here in order that the reader may bear it in mind through the next few pages.

It is curious that the letters which we should suppose to be the weakest and most liable to rejection are precisely those which keep their ground most persistently. The nasals, semivowels, sibilants, and ह are almost always retained. Thus, in Prakrit *kāla*, *komala*, *kusuma*, *kula*, *pavaṇa*, *paarī*, *paṭhama*, *palāsa*, *mahilā*, *gaha*, exhibit these letters in their original state, while if any of the letters of the four vargas had been in those situations they would have been softened or rejected, or in some way or other changed, as will be seen in the next two sections. The modern languages follow the Prakrit lead in this respect with but few deviations. The nasal is the most ineradicable of all; so much so that the insertion of an anuswāra even will generally suffice to preserve a single consonant which would otherwise have disappeared. Compare such words as ताल, तारा, तान, with

¹ Literally a man who gets Brahmans to hold a sacrifice for him and pays for it, but in modern times applied to any one who has a right to certain services, as those of the barber, shoemaker, etc.

ताप, ताव, काक, and it will be seen that while the former preserve their semivowels and nasal unchanged throughout all sorts of compounds and derivatives, the latter change their medial consonant in many ways. Thus, from ताल "hand-clapping," come H. ताल, ताली, and so in all; but from ताप "heat," we get either ताव or ताउ. It may be surmised that in the effeminate speech of those days, or rather in the fantastically refined utterances of that particular school of writers by whom the plays and Prakrit songs were written, the strong consonants seemed too harsh and grating, and were therefore omitted, while the soft liquid semivowels were retained as not being too stiff or hard to break the delicate warbling cadences in which they so much delighted; and even in the speech of the masses somewhat of this feeling must have prevailed, as we find it to a certain extent true of prose works which are written in a severer style and without any great seeking after euphony.

The changes which the nasals, semivowels, and sibilants undergo are of an organic, not of a positional nature, and will be discussed in their proper place.

§ 52. (2.) The softening of tenues to mediæ is a very frequent characteristic of genuine Tadbhavas, but it occurs more regularly in some letters than in others; *k*, *t*, *p*, go regularly into *g*, *d*, *b*, but changes from च into ज are rare, and those from त into द nearly equally so. Examples are—

क into ग.

Skr. काक "a crow," Pr. काओ, H. काग, P., M., G., B. *id.*, S. कांग, G. dimin. कागडो.

Skr. शाक "potherb," Pr. साओ, H. साग, P. *id.*, S. सागु.

Skr. शकट "cart," Pr. सओ, H. सगड, but B., O. हकडा, and vulgo हकडी "hackery."

Skr. कंकाल "skeleton," H. कंगाल "starving," and so in all.

Skr. कंकण "bracelet," Pr. कंकणो, H. कंगन, and so in all.

Skr. पर्यंक "bedstead," Pr. पल्लंको, H. पलंग, and so in all.

च into ज.

Skr. कुञ्चिक "key," H. कुञ्जी, P., S., M. *id.*, B. कूजी, O., G. कुंची, O. also कुंझी.

Skr. काच "glass," M. काज (vulg.).

ट into ड.

Skr. कटि "worm," Pr. कीडो, H. कीडा, B., O., P. *id.*, M. कीड, किडा, G. कीडो, S. किडो.

Skr. कर्पट "cloth" [Pr. कप्पडो], H. कपडा, P. *id.*, S. कापडो, G., M. कापड, B., O. *id.*

Skr. कटाह "pan" [Pr. कडाहो], H. कडाही, P., S. *id.*, G. कढा (कडहा) कढई, O. करई, कहाइ, कढेइ, B. कड, कडाई.

Skr. वट "banyan-tree," Pr. वडो, H. बड, and so in all, but M. and G. वड.

Skr. भाटक "hire," H. भांडा, S. भांड़ा, in all as H.

Skr. घट "jar," Pr. घडो, H. घडा, M. घडी *id.*, B. *id.*, and so in all.

Skr. घोटक "horse," Pr. घोडओ, in all घोडा.

त into द.

जामाता "son-in-law," Pr. जामाअ, H. दामाद (but through Persian داماد).

प seldom stops short at ब. It would appear that ब itself differed very little in sound from व in most parts of India. प therefore modulates into व, and still further into उ, and sometimes combines with a preceding *a* or *ā* into ओ, or औ. Thus:

Skr. स्वपन¹ "sleeping," Pr. सिविखो, सिविणो, H. सोना, P. सौणा, S. सुन्हणु, G. सुवुं, B. सोइते, O. शीइबा.

¹ I use this form, and not स्वप्न, because the latter contains a mixed nexus, and the nasal would consequently disappear; the words in the text could not come from such a form.

Skr. वपनं "sowing," H. बोना, B. बूअन, O. बोइवा.

Skr. शपथ "oath," Pr. सवहो, H. सौह, P. सोऊं, S. सुंऊं.

Skr. चेपनं "moving," Pr. केप्पणं, H. खेवना "to row," P. *id.*, G. खेवा,

M. खेवा "rowing."

Skr. कपाट "door," Pr. कपाटो, H. कवाड, P., M. *id.*, B., O. कबाट.

Skr. कपर्द "cowrie," H. कौडी, M. कवडी, and so in all.

Skr. ताप "heat," H. ताव, ताउ, and so in all.

Skr. सपत्नी "co-wife," Pr. सवत्ती, H. सौतिन, सौत, M. सवत.

Skr. सपादिक "with a quarter," H. सवा, and so in all.

Vararuchi does not make this rule general in Prakrit, but confines its operation to *t*, *p*, and *ṭ*, giving as examples *udū*, *raadam*, *āado*, *nivudī*, and others, for *ṛitu*, *rajatam*, *āgata*, *nivṛiti*, etc. He makes transition from *p* to *v* general, and gives instances: *sāvo*, *savaho*, *ulavo*, *wasaggo*, for *śāpa*, *śapatha*, *ulapa*, *upasarga*. *Upa* is universally changed into *uva*, and even *ua* (see § 53). The change of *ṭ* to *ḍ* is illustrated by *nado*, *viḍavo*, for *naṭa*, *viṭapa*, but there are hundreds of instances to be found in Prakrit works.

§ 53. (3.) Elision is in Prakrit the rule; retention and weakening, to a certain extent, the exceptions. Vararuchi's rule (ii. 2) is very sweeping, and includes all the unaspirated letters of the four organs, except the cerebrals, as stated before (§ 51). य and व are added probably because they are so closely connected with ज and ब respectively. The instances given are *maūlo*, *ṇaūlo*, *sāaro*, *naaram*, *vaanam*, *sūi*, *gao*, *raadam*, *kaam*, *viānam*, *gaā*, *mao*, *kaī*, *viulam*, *vāūnā*, *naanam*, *jīam*, for *makula*, *nakula*, *sāgara*, *nagara*, *vachanam*, *sūchi*, *gaja*, *rajatam*, *kṛita*, *vitāna*, *gadā*, *mada*, *kapi*, *vipula*, *vāyunā*, *nayana*, *jīva*.

The confusion arising in Prakrit from this constant elision is extraordinary; thus, *vaana* stands for *vachana*, *vadana*, *vapana*; *vaa* for *pada*, *vayas*, and *Vraja*; *rāi* for *rājī*, *rātri*; *raa* for *raya*,

rajas, rata; and the accumulation of vowels with no intervening consonant is in striking contrast to the Sanskrit, which tolerates no hiatus. *Juaījana* जुअइजण = *yuvatijana*, उअआरअ *uāraa* = *upakāraka*, *uāa* = *udaka*, *airahaa* = *abhirataka*, *aiujjua* = *atyrijuka*; so that we seem to be listening to some Maori or other Polynesian dialect, rather than to anything Aryan; and I cannot bring myself to believe that the people of India at any stage of their history ever spoke such a form of speech as this.

In the modern languages instances of elision are tolerably frequent, but they do not result in hiatus to such an extent as in Prakrit. Either one of the vowels goes out with the consonant or the two vowels which are left behind coalesce into one, or hiatus is avoided, as it is also in some kinds of prose Prakrit, by the insertion of य, व, or even ह. For the treatment of vowels in hiatus see §

क.

Skr. कोकिल “koil,” Pr. कोइलो, H. कोइल, P., S. *id.*, G. कोयळ, O. कोयिल.

Skr. सुवर्णकार “goldsmith,” Pr. सोणारो, H. सोनार, सुनार, P. सुनिआर, S. सोनारो, M. सोनार. Similarly are all names of trades ending in कार treated, as कुम्भकार “potter,” and others.

Skr. मकुल “bud,” Pr. नउलो, H., B. मौल.

Skr. नकुल “weasel,” Pr. णउलो, H. नेवल, P., B., O. नेउल, G. नोलियुं, S. नोइ.

Skr. नारिकेल “cocoa-nut,” Pr. णारिएलो, H. नारियल, M. नारेळ, G. नारियळ, P. नरेलु, नलेइ, S. नरेलु and नाइइ.

ग.

Skr. द्विगुण “twofold,” Pr. दूउणो, H. दूना, P. *id.*, S. डूणा, M. दूण.

Skr. नगर “city,” Pr. णअरो, नयरी, H. नैर,¹ G. नयरी.

¹ In Old H. नयर. The word is seen in the terminations of a few names of towns, as *Bikaner*, *Bhatner*.

Skr. सुगंध “fragrant,” Pr. सुअंध, H. सौंधा, P. *id.*

Skr. भगिनी “sister,” H. बहिन (for भइन), P. भैण, बैन्ह, S. भेणु,
G. बेहेन, M. बहीण, B. बइन, O. भौणी, भउणी.

च.

Skr. सूची “needle,” Pr. सूई, H. सूई, P., S., M. *id.*, G. सोय, O. and B.
retain च.

Skr. काच “glass,” S. काओ.

ज.

Skr. राजा “king,” Pr. राज्रा, H. राउ, राव in all, so also in राजकुल =
राउल, राजदूत = राउत, राजपुत्र = रावत.

Skr. बीज “seed,” H. बिहन, M. बी, बीं, P. बीह, S. बीहणु, O. बिहन.

त.

Skr. पिता “father,” Pr. पिआ, H. पिउ.

Skr. माता “mother,” Pr. माआ, H. मा, माइ, माउ.

Skr. भ्राता “brother,” Pr. भाआ, H. भाई.

Skr. घात “wound,” Pr. घाओ, H. घाव, घाउ, so in all.

Skr. शत “hundred,” Pr. सअ, H., P. सौ (सउ) सै.

द.

Skr. खादनं “eating,” Pr. खाअणं, H. खाना, P. खाणा, S. खाइणु,
M. खाणें, G. खावुं, O. खाइबा, B. खाइते.

Skr. रोदनं “weeping,” Pr. रुअणं, H. रोना, P. रोणा, S. रुअणु,
G. रोवुं, B. रोइते.

Skr. हृदय “heart,” Pr. हिअअं, H. हिया, P. हियां, हिआउं, S.
हिँआँउ, M. हिथ्या.

Skr. कदली “plantain,” H. केला (कयला), P., S., B. *id.*, S. केविडो
(diminutive), G. केळ, केर, M. केळ.

प.

Skr. प्रापनं “getting,” H. पाना, though also पाउना, P. पाउणा,
S. पाइणु, G. पामवुं, M. पावणें, B. पाइते, O. पाइबा.

Skr. कूप "a well," H. कूआं, P. *id.*, S. खूङ्ग, G., M. कुवो, B., O. कूआ.

Skr. पिपासु "thirsty," H. पिपासा, so in all.

Skr. दीप "lamp," H. दिया, P. दीआ, M. दिवा, G. दिवो,

ट and ड are never elided; in non-Aryan words they would naturally hold their own, and in Aryan words they would generally spring from च, द्र, or ते, दे, and so being already, as it were, on the second step of development, they would not ordinarily be any further corrupted, except in the case of ड, which being now in the majority of cases pronounced as a harsh *r*, is not unfrequently confounded with र; its further change into ढ comes under the head of organic changes.

With regard to ब, it must be observed that in Prakrit there is much difficulty in distinguishing between it and व. It is not correct to say that they are quite identical, however, as some words are always written with व, others always with ब. Cowell, in his edition of Vararuchi, makes no distinction, putting both letters under व, and he is to a certain extent justified in this course by his author, who is very hazy on the subject. Bengali and Oriya among the moderns are the only two languages which make no distinction between these two letters, but they make them both into ब. The only notion the Bengali or Oriya peasant has of *v* is that it is the same as *w*, which again is to him only *u* pronounced quickly between the two vowels (see what has been said on this subject in Chapter I. § 23). If we wish really to know which words ought to be spelt with *v* and which with *b*, we must go to the Marathi and Gujarati, which keep the two sounds distinct.

Thus, Sanskrit has बदर, and not वदर; though Cowell gives वोरं as the Prakrit, it clearly ought to be बोरं, and M. has accordingly बोर, and not वोर.

It is probable, however, that though the distinction undoubtedly exists even in Prakrit, it was not very carefully observed, and if the harder प was softened into a vowel, it is

not likely that व would escape. Examples are not to be looked for so much in Bengali and Oriya as in the western languages.

व when elided leaves its mark behind in the labial vowel o, and य similarly in the palatal vowel e, in cases where they are both preceded and followed by a, as in *ava*, *aya*.

अव, Prakrit *oāra*=*avatāra*, *oāsa*=*avakāśa*, *oiṇṇa*=*avatīrṇa*, *ohi*=*avadhi*; but *ava*, arising from softening of *apa*, does not undergo further change, as *avasaiṇa*=*apaśakuna*, *avarāha*=*aparādha*=, *avarāṇha*=*aparāhṇa*.

अय in Prakrit occurs most frequently in the causal verb; thus:

<i>rochemi</i>	<i>rochemo</i> ,
<i>rochesi</i>	<i>rochetto</i> ,
<i>rochedi</i>	<i>rochenti</i> ,

for Skr. *rochayāmi*, *rochayasi*, *rochayati*, etc.

In other positions, however, *aya* not unfrequently becomes *ā* by simple elision of the *y*; examples are *jaā*=*jaya*, *jāā*=*jāyā*, *āāso*=*ayāśas*, *vaā*=*vayas*. In these cases it was probably pronounced as *j*, just as it is in the present day in many parts of India. In the moderns no such process as this is to be found.

§. 54. It is now necessary to inquire why these three processes—retention, weakening, and elision—exist side by side, and what is the law which decides in every case which process shall be followed. It is easy to talk, as some authors do, of the “lawless licence” of Indian etymology; but this is only a confession of ignorance; it amounts to saying that because we cannot find the reasons for any particular change, therefore there are no reasons at all; the blind mole says there is no sun because he cannot see the daylight. Reasons there must be, and it is our business to try and find them out; or at any rate in this early stage of inquiry into the elements of the modern Indian languages, we may perhaps be satisfied if we can point out some slight indications which, if followed up hereafter, may lead

later inquirers to a discovery of the full and perfect system. The following hints are given in this hope, and do not pretend to be anything more than hints.

The cases of retention from their form are nearly all seen to be Tatsamas, or such very late Tadbhavas that they have not yet had time to make any great divergence from the Tatsama form. The principal difficulty lies between weakening and elision. The Prakrits may be cleared away at once by saying that they always elide, and we may further get rid of the cerebrals, which are never elided. The inherent weakness of प, which leads it almost always to be softened into the semi-vowel, places this letter also on a different footing from the rest. When it has become व; and by a step further औ, औ, and उ, its total elision becomes rather a question of vowels than of consonants. Thus, प्रापनं having become पाउना, the further change to पाना is a matter of vowels, and more especially in those languages where the verbal base ends in a vowel, while the termination begins with one, as in the case of Bengali *ite, ilām*, or Sindhi *inu, indo*; where, to avoid too great a clash of vowels, the *u* naturally disappears. The same remarks apply in a still greater degree to ब, as has been pointed out in the preceding section. The semivowels, nasals, sibilants, and ह, do not come within the scope of this inquiry, as they are seldom if ever elided, except य and व, for which we should probably understand ज and ब, and they cannot be weakened, as they have no corresponding weak letters, being in fact mediæ themselves; consequently their changes are not positional but organic.

Having cleared the way somewhat by getting rid of the above-mentioned classes, there remain क, ग; च, ज; त, and द; and in the case of these six letters the rule appears to be that they are generally elided when preceded by a long or accented vowel, generally retained if mediæ, or weakened into mediæ if tenues, when preceded by a short or unaccented vowel.

Contrast *kókila*, *khādanam*, *rōdanam*,—where the preceding vowel is long, and in which therefore the consonant is elided, sometimes even together with the following vowel, as *koīl*, *khānā*, *ronā*,—with *kapōta*, *kaddā*, *chakōra*, which are followed by a long vowel, and in which, therefore, the consonant is retained, as *kapot*, *kad*, *kadhi*, *chakor*. By the operation of this rule *hrīdaya*, *kādālī*, *prāpanam*, *kūpa*, *rājā*, *sūchi*, *vīja*, lose the single consonant altogether, as shown in the last section. It would further appear that when two long or accented syllables come together, the intervening consonant goes out. Thus, in the class of words expressive of trades, *kumḍhākāra*, *sūtrādhāra*, become *kumhār* (through *kumhaār*), *chhutār*; and even where a short vowel intervenes, as *suvarṇākāra* = *sonār*, *lōhakāra* = *lohār*. Again, there are cases where the word having been in existence in Prakrit has elided its consonant in accordance with Prakrit rules, such as *mākula* = *maul*, *maul*, *sugandhā* = *saundhā*. Even here there is sometimes a tendency to revert to the rule above, as in *nakulā*, “a weasel,” which should by rule retain its consonant; having, however, lost it in Prakrit, the preceding vowel is lengthened, and we have *neval*, *neul*, etc. The words *pitā*, *mātā*, are oxytone, but having lost their *t* in Prakrit they remain without it in modern times. There might seem to be an exception in *dviguṇa*, but *dvi* has first become *dū*; thus, *dūguṇa* is like *kókila*, and the consonant goes out. Further instances are *sūkara* = *sūar*, *kāka* = *kawwā* (i.e. **काउ** + **आ**, the form *kāg* given in § 52 is rare and well-nigh obsolete), *sītakāla* = *siāro*, S., (i.e. *siādro*), where the *t* is elided through the preceding long vowel, and the *k* through Prakrit influence, *jāgaran* = *jāgnā*.

On the other hand, the consonant is retained in a number of words derived from Sanskrit causals because the accent is on the first vowel of the causal characteristic: *bhedāyati*, *ropāyati*, *māpāyati*, form *bhejnā*, *ropnā*, *māpnā*. In the causal verbs which retain still a causal signification, the causal characteristic

appears as long *ā*, as in *chalāna*; in the above verbs it does not appear, though it leaves its mark behind in the retention of the consonant, which would otherwise be rejected, because preceded by a long vowel. Compare *ronā*, from *rodanam*, with *ropnā*, from *ropāy-*; also *chhānā*, from *chhādanam*, with *bājnā*, from *vādāy-*.

The difficulty in this theory is that it was formerly stated (Chap. I., § 7) that early Tadbhavas—i.e. words which had come down through the medium of Prakrit—were distinguished by the fidelity with which they retained the accent, and it is part of this hypothesis that Prakrit also retained the accent. Yet here we find words retaining the accent, that is, showing traces of having felt its influence, and, therefore, having been in existence at a time when the Sanskrit accent was still known and heard, and which should, therefore, agree in form with Prakrit words, which yet do not agree in form with Prakrit. The words in § 53, where elision is practised, do, it is true, agree, but not those in § 52, where the consonant is merely weakened. Such forms, for instance, as H. *sagar*, Pr. *saadhō*; H. *sāg*, Pr. *sāo*, seem to militate against the above theory. To this it may be replied, that the fact of the divergence of Prakrit in this respect from the modern languages is an additional argument in favour of the theory of the unreal and merely literary character of the constant elisions in that language, and that it is chiefly in Prakrit poetry that these elisions are found; in Prakrit prose they are much less frequent, and in Pali and the earlier forms of Prakrit they are almost unknown. Still, I must confess that this theory of the effect of the accent and the relation between long syllables and the preservation or elision of consonants, though it will probably eventually turn out to be correct, is at present in rather a crude state, and will require to be worked out at greater length when fuller materials are available.

§ 55. The rejection of the final inherent *a* in the very large

class of Sanskrit nouns which end with that vowel, has had the effect of producing a great number of words with consonantal endings in the modern languages; and, following Grimm's law, we should expect that Sanskrit words ending in *ga*, *ja*, *da*, *ba*, would have the consonants hardened to *k*, *ch*, *t*, *p*, respectively. The fact is, however, the reverse. Occasionally we find instances where this does take place, as in Marathi दाप for दाब, but these are not numerous. The cause of this appears to be that the final *a* was retained till very recent times. In poetry it is even now required to be pronounced, and in Bengali and Oriya, though not heard in ordinary rapid talking, directly a man speaks slowly and distinctly, the short final *a*, there changed to *o*, becomes audible. Thus, it has happened that these letters have always been regarded as medials, and treated as such, with a tendency to weakening rather than strengthening. On the other hand, in those Sanskrit nouns which end in a consonant, it is generally only the nominative case to which the description applies; the other cases having vocalic case-endings lose the consonantal type, and in Prakrit (Var. iv. 6) we have the absolute rule that a final consonant is always elided. Thus, Skr. सरित् "a river," becomes in Old Hindi सरिता.

The majority of instances of consonantal endings wherein a soft or sonant letter has been hardened is to be found in Panjabi, where Persian and Arabic words have been so long in use. These words having in those languages a true consonantal ending have in some instances been hardened. It is true that in Arabic the nouns have technically their vowel case-endings in the shape of tanwīn; but, as is well known, tanwīn has for many centuries been a mere grammarian's fiction. No Arab ever says *rajulun*, *rajulin*, *rajulan*, in conversation, whatever he may do when reading the Kur'an; so that practically these words met the ear of the Panjabi as true consonantly terminated words, and he has hardened the final

consonant in some cases. Thus, he says किताप for كِتَاب, मसीत for مَسِيد, सहित for سَهْد, and the like. The same practice is also occasionally found in Aryan words, as पत "dignity," from पद्; सेप "service," from सेव (i.e. सेव). The same process exists also in Sindhi, in spite of the fact that in that language all nouns without exception end in a vowel. This vowel is often so short and light as hardly to be audible.

But on the whole the hardening of final consonants is rare and not sufficiently regular to constitute a rule, though we are justified by analogy in supposing that if consonantal endings were more frequent the process of hardening would be more often evident.

§ 56. Organic changes for the most part operate without reference to position, being found nearly as often in initial as in medial consonants. They are also in many cases confined to particular languages or dialects.

In the case of the gutturals there appear to be no organic changes in the Prakrits or modern languages, with the exception of the compound च (क + ष). In Sanskrit a connexion appears to exist between the letters of this organ and the palatals. When a verb beginning with a guttural is reduplicated, the corresponding palatal is used, as कुट् "to sever," = चुकुट्; गम् "to go," = जगम्. It is probably this practice, taken in connexion with the similar custom in nouns of changing च् when terminating a base into क् before certain case-endings, as वाक्, acc. वाचं, that has led to the commonly received idea that the genitive postposition in Marathi, चा, is derived from or connected with the corresponding Hindi का. If this be so, we should expect to find that क was regularly replaced by च in Marathi. After considerable search, however, I am unable to find any such instance. If, then, the above supposition be correct, it must be an isolated case.

It must be remembered that the modern languages have

almost entirely abandoned the Sanskrit verbal system, and form their verbs from one or two tenses only of the Sanskrit verb, chiefly from the present tense and certain participles and verbal nouns, so that the reduplication of the ancient verb would not be reproduced in modern speech. Similarly the noun takes for its base one form, and that generally the nominative case of the Sanskrit; so that here also the euphonic changes required by the structural peculiarities of that language would not be reproduced.

The solitary instances of H. काका and चाचा "uncle," and O., B. चास=हृषि, are all that can be brought forward, and काका, though an Aryan word, comes into the modern languages through the Persian.

§ 57. In connexion with the palatals, however, there is another and, at first sight, less explainable tendency. In a considerable class of words they modulate into cerebrals or dentals, that is to say, into one or other of the departments of the lingual range of sounds. The instances of जामाता, H. दामाद, and घी=ह्री, have been mentioned above (§ 49). A more widespread example is afforded by a class of words meaning "to press," "stamp," and the like. The earliest type of this group is perhaps the Skr. root छप, or छंप, which is said to mean "to go"; but after making all due allowances for the copiousness of Sanskrit, every third root in that language can hardly mean "to go," though the lexicographers calmly assert that it is so. Perhaps this root is only a dialectic form of चपय, the causal of चि "to strike," which would well enough agree with the modern meanings, "to stamp," "press," "tap," etc., in this way that stamping would naturally be defined as the act of causing a seal or stamp to strike the paper or other article. This idea will not appear unreasonable or far-fetched to those who remember how constantly ideas which in European languages are expressed by simple verbs

are in the Indian languages rendered by causals, or rather by words which still retain a causal form; thus, "to call" or "summon," बुलाना, causal of बोलना, *i.e.* "to cause to speak," as उसको बुलाओ "call him," in full, "cause him to (come and) speak (to me)"; डुबाना "to drown anything," causal of डूबना "to sink," *i.e.* "to cause anything to sink"; बचाना "to rescue," causal of बचना "to escape," "be saved," *i.e.* "to cause one to escape"; समझाना "to explain," from समझना "to understand," *i.e.* "to cause to understand"; and very many others.

With the palatal initial, then, we have: Hindi छाप "a stamp" or "seal";¹ छापा "a stamp," "an edition of a work," also the sectarial marks stamped by Hindus on various parts of their bodies; छापना "to print"; छापती "a seal" or mark made of cowdung and put on a heap of grain to prevent its removal; छप "a splash," or the sound made by an object striking the water, and derivative छपाका "a splash," "squash"; छपक the same; छपकाना "to dash or splash water"; छपरी "a puddle"; and other words.

As one of the senses of चि is "to disappear," the causal would mean "to cause to disappear," *i.e.* "to hide," hence with the *i*-sound comes छिपाना "to hide," छिपना "to lie hid," छिपाव or छिपाउ "concealment." These words are also written with *a*; from the cognate idea of "covering" comes छप्पर "a thatch" or "thatched roof," छप्परखट "a bedstead with curtains," छिपकी "a lizard," from its hiding in crevices of walls, etc.

With rejection of the aspirate, by no means an unusual process in the vulgar speech, we get a long array of words, which may, however, be referred also to Sanskrit चापय, causal of चि "to heap," "to collect." This चि, however, is probably even in Sanskrit connected with चि, and some of the meanings

¹ From this word comes the now vulgar expression, "first-chop," meaning the best kind of any article, that which bears the highest stamp.

of the following words agree better with the latter than with the former. It is easy to see the connexion between all these meanings. To strike, press down, press a covering down over anything, cover, conceal, hide; from pressing down by another turn of thought come the ideas of pressing down into a vessel, heaping up and pressing tight together, collecting in a heap, squeezing, and the like. From one primary idea the Aryan mind runs off down many radiating lines of thought, so that derivatives widely apart in meaning now-a-days may often be clearly traced to one central root.

चाप "a bow" (also in Skr.). चापड़ा "cake of cowdung," made by *stamping* and *flattening* the dung between the hands. चांप्रना "to stuff," "press," "squeeze." चांप "the lock of a gun,"—that part, to wit, which is *pressed* down on the nipple. It also means the stocks, or other instrument of punishment. चपाती "a chapatty," or thin cake of unleavened bread, made by *patting* and *flattening* dough with the hands. चपटा or चिपटा "flat." चपटाना "to flatten." Then a string of words with the meanings of being pressed close to, adhering, clinging. चिपटा "clammy," "viscous." चिपटना "to stick to," चिपकना the same; also "to be compressed." चिमटा "tongs." चिमटना "to cling to" (you say to a child, मत चिमटो "Don't tease!"). चपकन "a tightly-fitting coat or cassock" (the French *soutane*). चपरास "a buckle," subsequently "a badge." From the idea of repression comes चपना "to be abashed" or "shamefast," "to be silent"; चुप "silence!" चुपरहना "to be silent." I omit a vast host of derivatives which would occupy several pages.

Marathi has ढाप, ढापणें, ढापा, ढपणें, ढपवणें, ढप्पर, ढप्पा; and with च, चांप, चापट "squat," "dumpy"; चापटणें "to flatten by beating"; and the usual quantity of derivatives. With i: चिपणें, चिपडा, चिपड, चिपडणें, चिपाट, चिप्प, चिमटना; also चिवडणें "to crush," "squeeze"; चिवडा "a mass of pulp"; चिवळणें the same as in M. क regularly reappears as ष; we

may here perhaps affiliate शिवणे "to thatch" (H. छप्पर), which should be kept distinct from शिवणे "to sew," which is from Skr. सीवनं. शिंपणे "to sprinkle," is probably from Skr. बिप् "to throw"; but this root also may be no more than an ancient causal of चि "to strike." To follow up this thread would, however, lead us too far away from the present subject.

In Panjabi most of the words quoted under Hindi occur. It is useless to repeat them.

Sindhi gives छपर "eyelid"; also the cognate sense of "thatch," which is probably the primary one, that of "eyelid" being secondary and metaphorical; छपि "the crouching of a beast of prey," as in छपि मारि विहणु "to lie in ambush"; छाप, छापणु, छापो; and with च: चापणु "to press or shampoo the limbs," चापहि "a knot" or "lump," चापुटो "a treadle," चापोडो "a flat clod of earth or plaster," चपर "a wedge," चपिडासु "a chaprass," चपिडो "a lever," चिपणु "to press," "mash," चिपतिरो "flat," चिमटो "tongs."

Gujarati has the principal words given under Hindi, and perhaps the whole of them, if the dictionary-maker had only put them in his book. In Bengali are found चप्पर, छापिते, छाप, छापा, छापाइते, "to conceal"; छापी "suppressed," "concealed," छिप्पि "a cork" or "stopper," छिपिते "to hide," छिबरा "pulp"; and with च: चपरास, चपट "the open palm of the hand," चपेट "a blow with the palm," "a slap," चपकन "a chapkan" or "cassock," चापिते "to weigh down" or "press in a vice," चाप "a clod," "block," "lump," "burden," चापाइते "to print," चापुया "curdled," "coagulated," चाबडा "clod"; with i: चिप्, चिपड "to squeeze," "express juice," "wring out water," चिमडिते "to cling to," and derivatives in crowds.

Lastly, Oriya has the same words as the other languages; also छापमुदि "a signet ring," चापडा "a slap," चापडाइबा "to slap," चपरा "muddy," "viscous," "slimy," चपसि "the running or blotting of ink on paper."

The above instances prove the existence of a large group of

words with a palatal initial, which are probably connected with the Sanskrit roots क्षि “to throw” (vulgar English “to shy”) with its two ancient causals क्खय° and क्षिप. This extensive group has for its fundamental meaning “to press,” and includes all the varied forms of pressing, as stamping, sealing, crushing, flattening, clinging, beating, and the secondary ideas of repressing, suppressing, compressing, and impressing.

We also find an equally large and varied group beginning with a lingual, either त or ट, and running parallel to the palatal group in all its meanings.¹ This group contains the following leading words: Hindi टप्पा “post-office,” i.e. place where letters are stamped, टप्पाल “letter-post”² (टप्पा + आलय = “stamping-house”), टपक “throbbing,” “dripping,” टपका “a drop of rain,” टपकना “to drop,” “drip,” टिपडी “the stocks,” टोपना and दोपना “to bury,” “cover with earth,” टाप “a tap,” “sound of beating,” टापा “a coop,” टापना “to tap,” “flatten,” “beat down,” तपक “a sledge-hammer,” टीप “pressing,” also “a note of hand” or “bill,” टीपना “to press,” टेपी “a cork” (comp. B. क्षिप्ति), टप्पा “a die” or “stamp,” टपना “to beat.”

Marathi टपकना “to drip,” टपटप् and other derivatives; टप्पा, टप्पाल “post-office,” टाप, टापटीप, टापटेप, टापरणे “to nail or peg down,” टापसी “butting,” टिपण “a note,” टिपणे “to note down,” also “to dab,” “daub,” “smear,” टिपरी “stocks,” also टपका, टिपका, टिपकणे, etc.

Sindhi टपुड “tapping,” टपुडणु टीप, टपणु “to beat out metals,” “to seal,” “to print,” टपिणी “stamping,” “printing,” टपो “a seal.”

Bengali टपटपानि “dripping rain,” टापर “a tap,” टापा

¹ See also a series of words of the types डप, डब, and दब, with the central idea of “compressing,” at No. (2) of § 59.

² This word, though apparently Aryan, is not much used in Northern India, though it is the common word in Madras and the South for our ordinary word *ḍak*, —the name of the place having been extended to the whole system.

"a coop," टिप, टीप, and टुप as verbal roots with the same meanings as above, टीप "a bond" or "note of hand," टेप, टेपिते "to squeeze," टोपाइते "to distil," टोपान "fallen in drops," "distilled."

Oriya टिपिबा "to press," "pinch," टिप "a bond," टिपणा "a finger mark" or "notch."

The other languages, Panjabi and Gujarati, have in general the same class of words as Hindi.

It is evident that there is some similarity and, to all appearance, close connexion between these two groups of words. The latter group has the sense of pressing, stamping, tapping, beating, dropping, dripping, and the like, which are too akin to the senses of the group in च to be mere accidental resemblances.

A few other instances may here be added :

Skr. चंचु "beak," H. चोंच and ठोंठ, O. चण्ट, थोंट, B. ठोंट.

H. टाट "canvass" (perhaps Skr. चाच), B. टाट and चट, O. चट, H. चटाई.

H. होकडा "boy," O. टोका (Skr. शावक).

Skr. छवि "cultivation," O. चास and तास.

We may also compare with this the change from H. चालीस "forty," to इकतालीस "forty-one," पैंतालीस "forty-five." This change takes place throughout the forties in Panjabi, Sindhi, Gujarati, but not in Marathi or Oriya, and only in two words, तेतालिस, पैंतालिस, in Bengali.

The substantive verb in Oriya has two forms, अहि, and अटे or अटइ, and it might be thought in the light of the remarks in this section that there was some connexion between the two. This would, however, be an erroneous supposition. The former, like B. आह्ने, Tirhut ह्ने, G. ह्ने, and several others, is from अच्क्षति, Prakrit from a Skr. root अच् "to appear"; whereas the latter is from वर्तते, root वृत्. The व is still preserved in B. बटे; this is shown by the fact that this tense has ट in all three persons, sing. अटे, अटु, अटे, pl. अटुं, अट, अटन्ति, which

it could not have were it derived from अह्. It may not be premature here to state that I find four Sanskrit roots regularly used as auxiliaries or substantive verbs by the moderns, viz. अस्, अह्, भू and स्या, and that the root वृत् is not used in this way by any of the languages: thus while O. *achhi* is in Oriya used to define a present or past, just like the H. *hai*, as in *heñiachhi* "he is becoming," *dekhi achhi* "he has seen," *ate* is used alone, and never as an auxiliary; in fact, in Bengali बटे, the sole remaining trace of this verb, has nearly lost its verbal meaning, and is now merely an emphatic affirmative, "it is so," "truly," "indeed," and the like.

The further extension of the principle of this connexion may perhaps result in fixing the derivation of many words whose origin is at present obscure. If asked to account for the connexion between two sounds at first sight so widely opposed, I would refer to similar conditions in other languages; as, for instance, the substitution of τ for σ in Attic Greek, as μέλιττα, θάλαττα, for μέλισσα, θάλασσα. The Indian palatals have a sibilant element in them, which justifies the comparison. So also in Latin we have the confusion between *c* when used as a palatal, and *t*, as in *vitium*, *otium*, *solatium*, also formerly written *vicium*, *ocium*, *solacium*, which rests undoubtedly upon a connexion with *k* (written *c*). Among modern languages the example of the Spanish may also be adduced where *c* before the palatal vowels *e* and *i* is pronounced as *th*, *cierto* is pronounced *thierto*, *Cesare*, *Thesare*, and even *z* shares the same fate, as in *zapato*, *zelo*, = *thapato*, *thelo*.

From the same cause arises that defect in speaking called a lisp, which renders some Englishmen unable to pronounce sibilants or palatals otherwise than as half-obscured linguals. But whereas in England this is only an individual and personal peculiarity, in Spanish it becomes a law. The people of Madrid all lisp, not only in pronouncing the *c* and *z*, but also in *s*: one cannot express in writing the peculiar sound they give to the

s in such words as *esta*, *usted*; it is something like *eh**t**a*, *uhté*. So also, to go to a different age, and family of languages, the Chaldeans and Syrians lisp the Semitic *š* *sh*, as in Heb. *shâlôsh*, Chal. *telath*, Syr. *tloth*, "three"; Heb. *shemoneh*, Chal. *temânei*, Syr. *tmone*, "eight," etc.

The origin of this confusion must probably be sought for in the construction of the organs of speech. The position of the tongue in uttering the palatals is not a very natural or simple one. In uttering a palatal the contact is effected by that part of the tongue which lies a very little above the tip touching that part of the palate which is just above the teeth, in other words, the inner surface of the gum. If in attempting to form this contact, the tip of the tongue itself is used, instead of that part of it which lies immediately above and adjacent to the tip, we get at once the lingual sound. Any one may satisfy himself of this by actual experiment. In the case of sibilants the transition is still simpler; in pronouncing *s* we touch the gum with a part of the tongue just above that part which is used in pronouncing the palatals; but we touch the gum so lightly, and with the tongue so broadened out, that we do not stop the outward flow of the breath completely; it oozes forth with that hissing sound which, whether in the human organ or in any other machine, invariably results from the rapid flow of air through a contracted passage. If, when the tongue is in the position necessary for the utterance of *s*, it be suddenly pressed close to the gum so as to effect complete contact, we hear the sound *t*: so that the difference between *s* and *t* rests not in the position of the organs, but in the degree of contact. With the palatals the contact is also loose, so that they may, in this respect, be brought under the same rule as the sibilants. Hence, in the case of a child who has not yet obtained complete mastery over his organs of speech, the natural impulse is to press the tongue firmly against the gum, so that he says "tee" for "see," "tell" for "shell," "tuch" for "such," and so on.

§ 58. As further illustrative of the close connexion between the palatals and sibilants, a peculiarity of Marathi may be here introduced, which may be also detected in Bengali, and perhaps sporadically in some of the other languages. छ in Marathi, whether originally existing in Sanskrit or arising from a Prakrit corruption of च, concerning which see Chapter IV., is almost universally changed into श or स.

Examples :—

Skr. इक्षु “sugar-cane,” Pr. उच्छू, M. ऊस, but H. ऊख.

Skr. च्छच “a bear,” Pr. रिच्छो, M. रीस, but H. रीछ.

Skr. कुक्षि “belly,” Pr. कुच्छो, M. कुस, but H. कोख.

Skr. क्षेत्र “field,” Pr. क्षेत्र, M. शेत, but H. खेत.

Skr. क्षुर “knife” (also कुर), Pr. कुरी, M. सुरी, but H. कुरी.

Skr. प्रश्च “to ask,” Pr. पुच्छ, M. पुसणें, but H. पूहना.

Skr. मत्स्य “fish,” Pr. मच्छो, M. मासा, but H. माछ.

Skr. मक्षिका “fly,” मच्छिआ, M. माशी, but H. मक्खी, B. माछी.

Skr. पश्चात्ताप “repentance,” Pr. पच्छत्तावो, M. पक्षावणें, H. पछताव,

G. पस्तावुं, B. पस्तान.

(?) Skr. क्षीणालय “destroyed house,”¹ M. शिंदल “whore,” H. क्षिन्नाल,

B. *id.*

It will be observed that श is used before the palatal vowels, as in शेत, माशी, शिंदल, but स in all other positions.

Bengali, though retaining छ in writing, often especially among the lower orders pronounces स, thus आछे “he is,” is pronounced *dse*, माछ “a fish,” *māso*, काछे “near,” *kāse*. In eastern Bengal, where the pronunciation reaches the utmost limits of corruption, *chh* is regularly sounded as *s*, and in that dialect of Bengali spoken in Assam, which now passes for an independent language, not only has the *s* sound driven out the *chh*, but has in many cases still further passed into *h*.²

¹ House of ill fame, with the sense transferred from the house to the inhabitant. I give the derivation merely as a guess.

² As the ordinary Bengalis have got into the habit of pronouncing स as *sh*,

In none of the languages except Marathi, however, does this custom prevail so universally as to amount to a rule. Of course if Bengali dictionary-makers or pandits would only let us see that language as it really is, we might find that the practice was far more frequent than was at first supposed; but as matters stand at present, the natural and regular developments of the language are all set down as vulgarisms, and no one is allowed to know anything about them, except it be in order to laugh at them.

§ 59. The connexion between dentals and cerebrals rests on the principle, which I shall do my best to prove in this section, that these two classes of sounds are really the weaker and stronger branches respectively of one and the same group, which, as being produced by the instrumentality of the tongue, may be comprehended under the general name of linguals. From the nature of the case it might be anticipated that Sanskrit, in its polished or classical stage, would incline to the use of the softer, or dental branch, while on the other hand the popular speech, as represented by the Prakrits, would adhere to the harsher or cerebral forms. It will be seen in the sequel how far this anticipation is borne out by facts.

Before taking into the discussion the modern languages, it is necessary here to set down an abstract of what is stated by writers in, or on, the Prakrits, on this head.

Vararuchi does not make the use of the cerebral in Prakrit into a distinct rule, he treats the instances where such use occurs as individual cases, and consequently writes in his least critical mood on this point. In ii. 8, he gives *paḍisaro*, *veḍiso*,

when they wish to express the pure dental sound of *s*, they usually write **छ**, thus **कुंच** "a needle," Skr. सूचि (but see the close of § 66) would be pronounced *sūcho*; **कुतार** "carpenter," Skr. सूत्रधार pron. *sutār*. Ignorant people introduce this **छ** in places where **स** should be written, thus one may see **मुहलमान** *musalmān*, **कुहम** *kusam*, and the like.

paḍāa, for *pratisara*, *vetasa*, *patāka*. Of these three the first belongs to the usual treatment of *prati*, which I have explained in Chapter IV. *Vetasa* is a genuine Aryan word connected with *vitea*, *vitis*, Pers. *بید*, Gr. *ῥέα*, O.G. *vidā*, our *willow*. Here the transition into *l* in English points back to Latin *salix*; Anglo-Saxon has *seal*¹ and *welig*, and the *l* in all these perhaps indicates that the original form was that with the cerebral *ḍ*, so that the Prakrit *veḍiso* would appear to be a truer pronunciation than the Skr. *vetasa*. *Patāka* is a formation from the root *pat*, which, as will be shown hereafter, is always in Pr. *paḍ*. Here, again, the Teutonic forms *fallen*, *feallan*, *vallen*, with their radical *l*, seem to show that the cerebral letter is the original.

Vararuchi ii. 35, *ḍolā*, *ḍaṇḍo*, *ḍasaṇo*, for Skr. *dolā*, *danda*, *dasana*. Here the harsher pronunciation is presumably the elder of the two.

ण is everywhere substituted for न throughout the scenic Prakrits.

Lassen § 38 says, "ut न in ण, ita त in ट, द in ड sæpius abiit," but he adds no illustrations, and his remark seems even by the light of Vararuchi and other Pr. grammarians to be too sweeping. Hoefer has collected many passages from the plays (pp. 55, 62); in the latter passage he says of द, "Rarissime in linguāli transit."

On the whole, the practice of scenic Prakrit may be thus summed up, that त rarely, if ever, is represented as ट; but that द, whether original, or arising from a softening of त, is not unfrequently replaced by ड, and न is universally disused, ण everywhere appearing.

As types of other descriptions of Prakrit, instances from Bhagavatī and Saptasātika may be given.

Skr. गत appears in the former work in the three forms of गड, गय, गञ्ज. This त, however, is not radical, and its change

¹ Our *sallow-tree*.

to ङ is valuable only as helping to the elucidation of the ञ of the past participle in some of the modern languages.

Skr. पतनं is पङ्गु throughout, and so in the Saptas̄., as also in scenic Pr.

A curious set of words occurs about which there is some doubt. *riyatta*, *uyattesu*, *uyattenti*, *uyattissanti*, *uyattana*, etc. If these are to be referred to the root यत्, we have a clear case of the cerebral standing for a Skr. dental. The word *anupariyattai*, however, is referred to the root अट् “to wander,” and in the passage where it occurs the meaning seems to be “wanders restlessly about” (*sich herummuht*, Weber). The *y* is explained as being substituted for the Sandhi, but this is unsatisfactory. In the passages in which these words are found, sometimes the meaning of अट्, sometimes that of यत्, is more appropriate. It were no great stretch to assume that both roots are originally one; the meaning of *yat* “to labour,” is closely akin to that of wandering, or moving; and we thus have two parallel roots in which the original cerebral is better preserved in the Pr. than in Skr.

At p. 413 of his article on the Bhagavatī, Weber states that the substitution of the cerebral for the dental often occurs, chiefly through the influence of preceding *r* or *ri*. With all due deference, however, to such high authority, a careful perusal of the Prakrit text by no means bears out this assertion. The dentals of Sanskrit appear to be quite regularly retained in all places where there is no disturbing influence at work. This might be expected from the style of the work, which, as the editor remarks in another place, holds a middle position between Pali and the Prakrit of the plays, besides being undoubtedly rather of the Māgadhi than of the Maharashtra type, and consequently more disposed to retain the Sanskrit consonants in their true and proper form. Those cases where the cerebral is due to the influence of *r* or *ri* come under the head of the mixed nexus, and are treated in Chap. IV.

They have, of course, nothing to do with the present inquiry, which is confined to cases where the latter stands alone in the word. ण is not in this work universally substituted for न, as in scenic Prakrit, though the substitution is tolerably frequent.

The Saptasataka, whatever be its date, is a composition of a different type entirely from the Bhagavatī. It is a collection of little chansons or love-verses, and its phonetic system is similar to that of scenic Prakrit, and probably just as artificial.

Indeed, in Song 2 of the collection it is expressly inferred that the language employed was not generally intelligible.¹ That this work represents a collection of popular songs is highly improbable. Weber says (p. 44) 'that the linguals (*i.e.* cerebrals) appear frequently in the stead of dentals, even without any perceptible cause, but the elaborate index of words at the end of the book contradicts this statement. The cases where a cerebral occurs for the Skr. dental are comparatively few. The root डह् occurs for दह्, and a few others which will be given below, but these cases are the exception; the rule is the reverse. This might be expected when it is remembered that the Prakrit of these songs affects above everything an effeminate softness and liquid flow. Judging from what one sees and hears of popular music in India at present, the most probable conclusion is that these verses were meant to be sung by dancing-girls, who are carefully taught and trained in music and singing. Though to our taste they appear almost pointless, yet to the native mind the little dash of feeble wit, with its undertone of indecency, when aided by the lascivious postures and piercing glances of the dancing-girls, would be irresistibly

¹ The lines are—

amiam pāṭiākavvam
paḍhium soṭum a je na jānanti
kāmaṣṣa tantatantim
kupaṇti, te kaha na lajjanti.

"They who know not how to read or hear the sweet Prakrit verse, (when) they practise the mysteries of love, how shall they not be shamed?"

charming. Although they are full of allusions to rural scenery and occupations, they appear to bear no greater marks of being real songs of the peasantry, than the insipid couplets of the bergers and bergères of Louis XIV.'s court did to the utterances of the gaunt starving peasantry of France at that epoch. The Prakrit of the Saptasataka is not in any sense the parent of any modern Indian vernacular, while that of the Bhagavati and the religious works generally may be. Its value for philological purposes is very small.

The Prakrit of the people was not this emasculated stuff. When a pure popular Prakrit word does occur in these songs, it is generally in the same form as that in which it occurs in sterner works, such as the Jain texts, but the author ruthlessly massacres consonants and long vowels to suit his rhyme or rhythm, or to secure a more harmonious turn to his verse.

In the matter of cerebrals; गण्डि stands for ग्रन्थि, through the influence of the preceding र; words like ठाणो, for स्थान, also occur where the rejection of the sibilant has harshened the pronunciation, though थाण and the like are also found. पठम for प्रथम, पडिरञ्ज for प्रतिरव, and the like, are also due to the influence of the र. सिठिल for शिथिल is a genuine instance of cerebralization, so is वडाञ्ज = पताक; also the root वड्, everywhere for पत् "to fall." It may be safely asserted, therefore, that the transition of dentals to cerebrals is not so universal or general a process in Prakrit as has been assumed, and that where it is found there is in each case some special reason in the original form of the root, or in some other peculiarity, which accounts for it. In making this generalization, however, it must be borne in mind that as yet only a limited number of Prakrit texts has been examined; further research may render it necessary to modify this opinion considerably.

The modern languages present at first sight an inextricable chaos and confusion. There are cases (a) where the Sanskrit has the dental, Prakrit and the moderns the cerebral; (β)

where Sanskrit has dental, Prakrit cerebral, and the moderns dental; (७) where Sanskrit and Prakrit have dental, the moderns cerebral; (८) Sanskrit cerebral, Prakrit the same, but the moderns dental. There are also instances in which two words, apparently cognate, differ only in this letter: one having the cerebral, the other the dental. In the effort to educe some system out of this chaos, a large number of words will now be given, grouped together, as far as possible, under some general root, so that the reader may be in a position to judge of the correctness of the deductions which will be made after the words have been given, as well as to form deductions for himself.

(1.) Skr. पत् “fall,” cognate roots probably पद् and पट्; Pr. पड, वड, वल; Var., Sapt., Bh. *id.* H. पडना “to fall,” and numerous derivatives; पडाव “halting-place;” पडती “fallow land,” etc. M. पडणें “to fall,” and derivatives; G. पडवुं, S. पडणु, B. पडण, O. पडिवा. From these must be distinguished a large class of words derived from this root through the noun पत्र. Even in Skr. we find the forms पट and पट्ट are Prakritisms from पत्र. This class owes its cerebral to the *r* of patra. Such are H. पटा, पट्टा, पटुआ, पाटना, पटना. Here also is to be referred पटन or पटना “a town.” The Skr. form is पत्तनं, and in M. both forms are found; the form पटन is probably the original, from पत्र “a leaf,” whence H. पाटना “to thatch with leaves. *Paṭan* or *paṭnā* means apparently “a thatched town,” or an assemblage of thatches.¹ The M. and H. पेट “a town,” may also be connected with this root, as also पाडा “a ward or division of a town.”

(2.) Skr. डप् “to collect, to press together,” (cf. *ḍamp*, *ḍip*, *ḍimp*, *ḍimbh*, *ḍumbh*, etc. Bopp’s Gloss.), Pr. not found. H. दाबना, दबना, दबाव, दबेल; M. दाबणें, etc., B. दाबन, O. दाबिवा, G. दाबवुं, P. दबणा, S. दबणु; all these words have the general sense of press, depress, compress.

¹ But see Caldwell, *Drav. Gram.*, p. 445, with whom I cannot agree.

Perhaps the following are also from the same root, H., M. डबडा "puddle" (collection of water), H. डबु "spoon" (collecting instrument), H. डब्बा, M. *id.*, and डब्बर "oil-pot of leather," H. डब "power, strength," H. डिविया "box," O. *id.*, B. डिवा, etc.

(3.) Skr. दंश् "to bite or sting," Pr. दंश्, Var., Sapt., Bhag. nowhere ड°, H. दंश्, दंश्क, M. दंश्, B., O., G. *id.*; but far more common are H. डंक, डांक, डंसना, डांसना; M. डंख, डंखणें, डसणें, डसाण (acid), डांच, डांचणें; (G. *id.*) डांस, डांसळणें; B. डांश्, डांशा; O. डंकिवा, S. डंगणु, डंगिणी, डंगु, P. *id.* In connexion with this root is दाढिका, a Prakritized form of दंष्ट्रिका, which in the moderns appears as H. डाढ "tooth," डाढी "beard," S. डाठ, डाड़ह, डाड़ही, G. डाहार, °ड, डाढी, B. डाड़, डाड़ी; but, on the other hand, P. दाहड, दाहड़, दाहडी, M. दाढ, दाढी, and O. दाढ, दाढी.

I am disposed to range here also Skr. डाकिनी "a witch," "female demon," which has the two forms *ḍākin* and *ḍāin* in all the languages. M. has also डंखीण, the idea is first that of biting, stinging, then that of annoying, injuring.

(4.) Skr. दह् "to burn," originally दघ्, and thus closely connected with the last root, which seems to have had a form दंख्, as well as दंश्. Probably also allied to दुह् "to hurt," originally दुघ्, as shown by the p.p. दुग्ध (Old High German *dringan*, our Anglo-Saxon *tregian*, "to vex," *trege*, "vexation"). Pr. डह्, Sapt., Bhag. दह, H. डाह, डाहना, and so in all. In all, however, the form with द occurs. H. दाहना and दाधना, M. दाहणें, G. दहझवुं, P. दधणा and दहिणा, S. दहो, दाहु, O. दाहिवा, B. दहन.

(5.) Skr. दर "fear," Pr. not found, H. डर, and so in all the languages; also डरना "to fear."

(6.) Skr. दल् "to split," "burst" (akin to दू, Bopp), Pr. दल.

Hence दल "a piece," "portion"; and thus two bands of men would each be called दल, hence the idea of H. दल "army"; दलना "to split" (peas,

etc.), दली "a clod," दाल "split peas or other pulse"; M. दाळ *id.*, दळ "army," दळणें "to grind," with many derivatives; B. दल, दलन, दलुया, दाल; O. *id.*, also दळ, दाळ, etc.; G. दाळ, P. दाळ, S. डारि and णलि, etc. Independently of the indications of a tendency to cerebralize manifested by the ळ (the Sindhi र is merely the universal change from ल), there are also many words which have ड, which can hardly be affiliated to any but this root. Such are H. डाल "branch," डाली "basket" (through दल "a leaf"), डली "a piece," "bit," डला "clod," डालना "to throw down" (primary idea, "to dash in pieces"), M. डल्ला "clod," डळण "intercourse," डाली "basket," डळणें "to pile," with derivatives; डाळ "split peas." Similar lists of words may be extracted from all the other languages.

(7.) Skr. तिलक "sectarial mark on the forehead," Pr. तिलअ, Sapt. *id.* This word occurs as a Tatsama in all the languages, but also and more frequently with the cerebral and elision of the ल, as H. टीका, P. टिक्का, S. टिको, M. टिका, O. *id.* and टीका, B. टिका; G. rejects the क, but keeps the ल in a cerebralized form, as टिक्क, टिक्की, टिक्को, M. has also टिक्का. This mark being frequently round like a wafer, the diminutive occurs as H. टिकली, टिकडी, टिकिया, टिक्की, meaning "a wafer," "a round cake," "a spangle," and the like; P. टिक्की, टिकडी, S. aspirated टिकर "a potsherd," ठिकिरी, ठिकिराठो, also टिकिडो, टिकी, G. टिकडी, M. टिकला, B., O. टिकली.

(8.) Skr. तुद् "to beat," allied roots तृद्, तुन्द, चन्द, तुण्ड, तुड; nouns तुन्दा "belly," तुण्ड "beak." Primary idea, "beat," "break," "split." Probably also connected with चुट् "to break," Pr. तुह, तुड, H. हुंड "stump of a hand," or "branch that has been cut off," adj. हुंडा "maimed," P. *id.*, S. हुंडो, हुंडिडो, G. *id.*, B. हुंटो; H. हुंडी "navel," B. टोटा. In both cases, however, M. थोंटा and थोंट "stump," H. ठोंठ "beak," हुंठ "stump," हुंठा "maimed," हुंठी "stubble," probably also टहनो (for ठनी) "a branch," M. हुठण "stump," O. थण्ड, थोंट, B. ठोंट. M.

तोंड "month," also तुंड, comes in here, and तुन्द "belly," though तुंडूम "belly-full," has the cerebral. It is unnecessary to give here the numerous derivatives from the root चुट्; the influence of the र fully accounts for the initial ट in all the languages. Even here, however, M. retains त in तुटणें "to break," तुटक, and many derivatives. There is a root तुट् in Westergaard, meaning "to quarrel," which may have had some connexion with this group, but no instances are given of its use.

(9.) Skr. तन् "to pull," तान "tone," Pr. तण, ताण. In addition to the usual forms तान, तानना, etc., H. has also टानना, टन् "twang," टनाना "to stretch," टना "clitoris," टण्टा "wrangling." M. cerebralizes the nasal ताणणें "to stretch," ताणा, ताणी "warp of a web," ताणाताण "pulling and hauling," ताण, etc.; also, however, तान, तानणें. There is also the series टण, टणटण, टणटणणें, टणा, टाण, टाणणें, and derivatives; G. ताण, ताणवुं, O. टाणिवा, B. टान and तान, P. ताणना, S. ताणणु and ट०.

(10.) Skr. दुल् "to shake," connected with तुल् "to weigh," and ह्रल् (ध्रल्) "to shake"; also with हृ, and perhaps तृ; Pr. डोला, H. दोल, दोलिका, दोला; but more usually with ड, as डोलना "to swing," डोला, डोली "a dooly" or "litter," डुलना, डुलाना, P. डोली, डोलणा, etc.; S. *id.*, also डोरणु, G. डोली and डोळवुं, M. डोला, डोली, डोलहारा, डोलणें, also डोळ. Here perhaps may be added M. डोळा "an eye," from the idea of "rolling." This word stands alone, no other dialect having any word at all like it for the eye. M. has also दोली, but this form does not seem to be much used. O. and B. have ड.

(11.) Skr. गुद् "anus," Pr. not found, H. गांड, and so in all, but S. गुई.

(12.) Skr. धक् "to destroy," connected with नक् (Bopp), perhaps also with चंक, etc., Pr. ढक्; H. ढक्का "a push, shove," G. ढकेलवुं, M. ढक्का, but also ध०, O. धका, B. ढक, ढेक. The form with ध is however also in use in all, and is apparently the only one used in P. धक्का, S. धिको.

(13.) Skr. रट् "to roar," रट् and रट् "to speak," रण *id.* Bopp connects

this root with वट् (Gloss. s.v. and Gram. comp. § 20, note 2). May we not also here bring in यत् “to strive,” “to offend”?, लट् “to babble,” “to be childish,” लङ् “to play,” “to throw;” from लट् we get to लङ् “to put out the tongue,” लल् “to babble,” “to play,” whence all the words meaning “lascivious dallying,” ललित, लीला, लाल, and the like. The central idea is that of noisy babbling, wrangling, fighting, and talking all at once, brawling, “strife of tongues.” From रट् comes राटि “strife,” H. राड and रार, G., P. *id.*, P. also राढ, S. रंङ, रडणु, रडि, रडकणु, रडको, रडो; M. रड, रडणै “to weep,” रट्टा, and many derivatives. G. रडवुं, H. रटना “to labour,” M. रट, रटाला, P. रटणा, S. रटणु are half-way between रट् and यत्. H. लडना “to fight,” belongs to this group. It occurs in all the languages, in M. however with the form लडणै. H. लडका “a boy,” P., B. *id.*, M. inverted लंकळ are apparently later forms from लाड “darling,” “pet child,” from लट् “to be a child,” लाल “dear;” here also we put लडु “a sweetmeat.” From the idea of *throwing* involved in लङ् come the words लङ् “a string” or “thread,” and perhaps लटकना “to hang.” This last seems connected with लता “a creeping plant,” wherein we come round to the dental, as also in लताडना “to labour,” H., G., P., S. a diminutive from यत्, also लथडना, “to draggle,” “trail,” H., M., G., P. Probably the same root under a slight modification is लण्ड “extollere,” “erigere,” whence लण्ड “penis,” H. लांड, लौंड, B. लेआंडा, M. लंड, P. लन, S. लनु.

This root has wide ramifications in Skr., and the derivatives in the modern languages might be developed to a very large number; the above may suffice for the present purpose. It is extremely probable that the whole group is of non-Aryan origin.

(14.) Skr. दण्ड “staff,” probably from root तड्, तण्ड “to beat;” the derivation from दम् + च does not commend itself to me. Pr. दण्ड, Sapt., and डण्ड, Var. ii. 35.—With *a* modified to *i* probably Skr. डिण्डिम “a drum,” is connected here; perhaps also दुन्दुभि “a kettle-drum,”

though by some this is referred to root तुम्. H. has the forms दंड, दंडी, दांड, दांडी, as well as डंड, डंडी, डांड, डांडी, डांडना, with the meanings of staff, punishment, to punish; *ḍānr* is the common word for an oar. Showing the connexion with तड्, there are ताड़ना "to punish," "blame," "threaten,"¹ and inverted डांटना, which is more common, also डटना "to restrain," डट्टा "a fence," either as restraining, or as made of sticks; डांठी "a straw," डांठ "the broken straw on a thrashing floor," perhaps दंथल "stalks of corn," "stubble." B. has दण्ड in all the senses as well as a verb दण्डास्ते "to stand erect," like a stick. It has also as popular words दांड "an oar," also "a fine" or other punishment, दांडी "a rower," दांडास्ते "to stand." Again the words with ड also occur, as डण्ड "fine," डण्डा "stalk of a plant," डांड "oar," डांडी "rower," डांडास्ते "to stand," etc. So too डांटिते "to rebuke," डांटा "a handle," डांटी *id.*, डांताल "full of stalks." M. दंड with many secondary forms, verbs दडकणे, "to weigh down," दंडणे "to punish," दडणे, "to lie hid," दडपणे "to restrain," the first, third, and fourth of these are from दड "a plug," "obstruction," also "an ambush," which word seems to be softened from root तड्, from which are also दड्डा, "a cork," दटावणे "to chide." There is also a series with the long vowel, दांड, दांडा, दांडी, दांडारा, दांडणे, and a host of derivatives; also दाट "thick," *i.e.* inspissate, coagulated, close, दाटणे "to crowd," दाटा "a cork" or "plug," दाठरणे "to become hard," ताडणे "to blame," "punish," also with the sense of investigating. The cerebral initial does not occur in Marathī, as that language exhibits a marked preference for dentals especially at the head of a word. G. has the dental series दंड, दंडवुं, दंडुकी, etc., also दड्डो "a cork," दडपवुं "to compress," दडव "a clod," दडो "a ball of compressed leather." It has the series with the long vowel, दांड "rude," "violent," दांडगो *id.*, दांडो, दांडी "a stick," दाट "thickness," दाटवुं "to bury," "conceal," दाटो "a plug," दाटी "a crowd." The cerebral initial appears to be in use, but

¹ Reminding us of German *tadeln*.

rare; डंड, डंडवुं, डांडो “handle,” डांडी “stick,” डांडीयो “a watchman,” etc. S. in opposition to Marathi has characteristically the whole series in ड, but no words in द. This language so constantly takes the cerebral in room of the dental, that it is not surprising to see it do so here. Panjabi has almost exactly the same list as H. with the characteristic preference for the short vowel. O. like M. has only the words with initial द.

(15.) Skr. स्था “to stand,” also घा, Pr. चिट्ठ, Sauraseni ठाअ, चिष्ठ, Magadhi चिट्ठ.

In the modern languages the sibilant always drops out, according to rule, and two parallel series of words are found, one beginning with the dental थ, the other with the cerebral ठ. Many words are spelt indifferently with one or the other.

(a) With थ.

Hindi थान (स्थानं), थाना, थानी, थापा, थापना (from the causal), थकना, थल, थर. Panjabi *id.* Sindhi थाणु, थाणो, थऊ, थाउं, थानी, थापणु, थापणा, थिअणु, “to be,” etc. G. थाणुं, थाण, थापण, थाकवुं, थवुं “to be”; थापवुं, थिजवुं “to congeal.”¹ M. थार “place,” थांग *id.*, थांगा, थकणें, थाकणें, थाकी, थापणें, थर, थिजणें “to congeal.” O. थिबा (for थाइबा) “to be,” थर, थाक, थाना, थायी “settled,” थित (स्थित) *id.*, थिर “steadfast,” थुइबा “to place,” थाति “a deposit.” B. थइ “standing,” थइकर “a builder,” था “place,” थाकन, थाकान “to be,” थाड “erect,” थान, थाना, थित, थितन, थाइते “to place.” Besides, there are in all numerous words formed from the derivatives स्थपति, स्थल, स्थविर, स्थाविर, स्थायिन, स्थापक, स्थिति, and the like; as well as others which cannot be referred to any special Sanskrit forms, but seem to have been created by the moderns from the general root *sthā*, such as M. थंड, H. ठण्डा “cold,” and the like.

¹ Geluque flumina constiterint acuto.—Horace, *Odes*, i. 9.

(β) With ठ.

Hindi ठां, ठांव "place," ठैर *id.*, ठहरना, ठप्पा; ठाडा "erect," ठाढ, ठाढा *id.*, ठीक, ठिकाना, ठिठर "numbness," "torpor," ठठ "crowd," ठठकना "to stagnate," ठिर "frost," ठाठ "state," P. *id.*, ठाणा, ठानणा, ठिल्ह "stoppage," ठुक "a crowd." S. ठट्ट "crowd," ठरणु "to congeal," ठल्ह "stoppage," ठहणु, ठहरणु, ठादु, ठाणु, ठारु "chilly," ठाहणु, ठीकु, ठुक. G. टाहाड (ठाड) "cold," ठठ "crowd," ठखुं "to be fixed," ठाट, ठाठ, ठाण, ठार "frost," ठावको (खावक), ठीक, ठेकाणु, ठोर. M. has most of the above also, ठाकणें "to stand still," ठाण, ठणें, ठाय, ठार, ठाव, ठिकी "a stack," ठीक, ठेप, ठेवणें. O. ठा, ठां, ठाई, ठाईआणी "concubine," ठणा "encampment," ठाणी, ठिआ "upright," ठिक, ठिकाणा. B. nearly the same.

Of course all the derivatives from स्था have not been given; they would fill a chapter if the grades of meaning were properly drawn out. Many words hitherto set down as non-Aryan may be affiliated to this widespread root. Among others, the curious word टाण्डा, about which so much has been said, comes in here. A Tanda is the station where the wandering grain-sellers called Brinjaries or Labanas deposit their stores. Several towns in India bear this name, and people have sometimes accounted the Brinjaries to be non-Aryans, chiefly on the strength of this word, which seems after all to mean nothing more than "station," "encampment," in spite of its cerebrals.

There would seem to be some misapprehension as to the nature of the Aryan cerebrals, which are treated by European scholars as though they were a class of sounds unpronounceable by our organs, and only to be with difficulty learnt by persons who have heard them uttered by the natives of India. Inasmuch as they are only found in the Indian branch of the great Indo-Germanic family, it has been somewhat hastily concluded that they are foreign to that family; and as a set of sounds,

which, in name at least, is identical with them, is found in the Dravidian languages, it has been assumed that these sounds are of non-Aryan origin, and that they have sprung partly from a tendency to harshen the pronunciation of the dentals, acquired by the Aryans from their non-Aryan neighbours since their arrival in India, and partly from a wholesale importation of non-Aryan words into Sanskrit and its modern descendants.

Without absolutely denying the possibility that both of these theories may contain a certain amount of truth, I would bring forward some considerations to show that they are not either undoubtedly correct, or even necessary to account for the presence of these sounds.

To go to the root of the matter, we may endeavour to get at a true perception of the real state of the question, by analyzing the sounds themselves. All consonants are produced by checking the outward-flowing breath through bringing into contact two of the organs of the mouth. Among these checks there is a regularly graduated series produced by the contact of the tip of the tongue with a region extending from the centre of the palate to the edges of the upper teeth. This series may be called the lingual series. If the tongue-tip be applied to the highest point of this region, that is, to the centre of the hard or true palate, the sounds resulting are harsh and similar to the letter *r*. Contact a little lower down, or more towards the front, produces a sound less harsh, and so on; the more forward the contact, the softer the sound, till at last, when we get to the edge of the teeth, the sound which results is extremely soft and smooth. The sounds of this series, as expressed by the Teutonic branch of the family, are among the harsher, though not absolutely the harshest, notes of the series. In expressing *t* and *d* we Teutons touch with our tongues the gum or fleshy part of the palate just above the teeth. The Southern European races form the contact lower down, just where the osseous substance of the teeth issues from the gums,

thus producing a softer sound than the Teutons. The Persians and Indians form it low down on the teeth, almost at their edge, thus producing the softest sound of all. This Indian sound, being the result of impact on the teeth, is a true dental; we Teutons have no dental sounds at all, and the Italians have only semi-dentals. The Indians have, however, in addition to their true dentals, another series produced by contact at a point a very little, if at all higher than the Teutonic contact, so that they possess, so to speak, the highest and lowest notes of the scale, but not the intermediate ones.

With the exception of the harsh Indian contact, the Teutonic is the highest in the scale, and the reason of this is probably that the race which uses it, living in a cold country, has preserved that nervous vigour which enables it to employ its organs of speech firmly and crisply. In the south of Europe the warmer climate has induced a certain amount of laxity, which has told on the articulation, and the point of contact has therefore fallen lower, to a position which requires less effort on the part of the speaker; while in the still hotter climate of Persia and India greater relaxation has taken place, and the muscles of the tongue have become flaccid, the member itself is long and soft, and naturally seeks the lowest and easiest place of utterance. Thus it comes to pass that words which the Teutons pronounce with **ट** and **ड** are pronounced by the Indians with **त** and **द**. While "daughter," as pronounced by an Englishman, would be written by the Indians डाटर, they themselves at an early period said दुहिता. If we could find out how this word was pronounced by the Aryans before they descended into the plains of India, we should probably have to write it डुहटा, or rather in those days the sounds represented by the letters त and द did not exist. So also Latin—

dens (डेन्स) = Skr. दन्त = Goth. *tunthus* (टुण्डुस).

decem (डिसिम्) = Skr. दश = Goth. *taihun* (टैऊन).

pater (पाटेर) = Skr. पिता = Goth. *fadar* (फाडार).

mater (माटेर) = Skr. माता = Old G. *muoter* (मुओटर).

duo (दुओ) = Skr. द्वि¹ = Goth. *twai* (ट्वै).

The relaxation indicated by those letters must have taken place after the Aryans came into this country. Before that time, and probably for some centuries after it, their lingual contact was, we may fairly assume, as crisp and firm, and its place as high up in the palate as that of their European brethren. In those days they knew of no distinction between त and ट, द and ड. They had, however, in their language words in which an *r* preceded or followed a dental, and in such combinations their lingual sounds assumed by degrees a harsher note, being produced by a contact nearer to the place of utterance of *r*, which is very high up in the palate. The people, though they gradually softened their place of contact, and brought it lower down in the mouth in the case of a single consonant, naturally retained the high contact when an *r* was in combination, and this habit must have become more and more marked as time went on. In proportion as the point of utterance of *t* and *d* sank lower in the mouth, the distance between it and the point of utterance of *r* got greater and greater, and the additional labour of moving the tongue from one point to the other increased, and to avoid this the higher and harsher point of contact for *t* and *d* was retained. Then as the *r*, under the influence of other phonetic laws, began to be regularly omitted, nothing remained but the linguals at a high point of contact, that is, what we now call cerebrals. So that when at length the art of writing was introduced, the national pronunciation had by that time become so fixed, that it was necessary to recognize the existence of two separate sets of lingual utterances, and to provide appropriate symbols for each.

But when they were confronted by the task of assigning

¹ The Indians always express our English *t* and *d* by their own cerebral letters; thus boat is बोट, Deputy Magistrate डिपुटी मेजिस्ट्रेट, and the like.

either cerebral or dental linguals to any individual word, the grammarians, to whose lot it fell to reduce their already highly developed language to writing, must have had a difficult problem to solve. It is, perhaps, not to be expected that we should be able, at this distance of time, to detect the principles on which they worked, or to ascertain what were the considerations which guided them in determining in each case whether to write a dental or a cerebral. It results, however, from the remarks just made, that what we now call the cerebrals are the real equivalents of the European *t* and *d*, and that it is not these, but the Indian dentals, which are peculiar to those tongues. It is fair, therefore, to assume that the original form of such words as those which are given above as examples, is that which retains the cerebral, and that the dental form has grown out of the cerebral one by the process of weakening and softening, which the Aryan organs of speech have undergone from the effects of climate. It would certainly be in full and complete harmony with the present theory that the Prakrits, regarded as the colloquial languages, should exhibit a more frequent use of the cerebral, while the Sanskrit, regarded as the language of literature, should prefer the softer dental, and, as has been stated above, it is actually asserted by several authors that this is the case. Unfortunately, however, an examination of such examples of Prakrit as are available by no means bears out this assertion, and the evidence of the modern languages, which is of almost conclusive importance in this respect, shows that both dental and cerebral are used with equal frequency, even in derivatives from a common root, and more than this, dentals are used in cases where the recorded Sanskrit word is written only with a cerebral.

It must have struck every one who has resided in India, that the native ear, though keen and subtle beyond belief in detecting minute differences of sound in native words, is very dull and blunt in catching foreign sounds. The ordinary

peasant who never mistakes सात "seven" for साठ "sixty," however softly or rapidly spoken, will often be quite unable to catch a single word of a sentence in his own language, however grammatically correct, and however distinctly uttered by an European, simply on account of some apparently trifling difference in pronunciation.¹ Now we see something of this sort in the Prakrit of the plays. The slight differences or rudenesses of pronunciation among the lower classes were made much of by play-writers, and exaggerated almost grotesquely. This tendency probably led to the practice of writing every न in Prakrit as ण, and will also account for much of the irregularity in the employment of the cerebrals and dentals. Provincial peculiarities of pronunciation, such as exist even in the present day in various parts of India, were seized upon and fixed, and words were spelt accordingly without reference to their etymology.

One of the most striking of these provincial peculiarities is the fondness of Sindhi for cerebrals. This language has preserved the harsher point of contact, and has not allowed itself to become weak and soft. The sturdy Jats wandering over their barren deserts were engaged in a constant struggle with nature for the bare permission to exist, and there was therefore little risk of their becoming languid or effeminate in speech, or in any other qualification.

In the following words there is nothing whatever to induce a change from the dental to the cerebral, and we are, therefore, driven to conclude that the Sindhi preserves a *bonâ fide* ancient method of pronunciation handed down from the earliest times, and perpetuated by its isolation from other Aryan nations.

¹ In the case of European names endless confusion arises from this source. The three English names, Kelly, Clay, and Currie, borne by three gentlemen living in an Indian station, were never distinguishable from one another by the natives, unless the title of each officer was prefixed. They were all called कलि.

S. डंडु "tooth,"	Skr. दन्त.
„ डिणु "day,"	„ दिन.
„ डखणु "carpenter,"	„ तक्षन्.
„ डखिणु "south,"	„ दक्षिण, B. डाइन.
„ डया "pity,"	„ दया.
„ डह "ten,"	„ दश.
„ डाणु "gift,"	„ दान.
„ डिओ "lamp,"	„ दीप.
„ डुखु "pain,"	„ दुःख.
„ कडही "when?"	„ कदा.

ट is not, however, substituted for त in the same regular way as ड. In the above cases the Sanskrit does not appear ever to have contained an र, or any other letter whose absorption would account for the cerebral.

Marathi and Oriya, on the other hand, exhibit, though less rarely than Sindhi, a tendency to use the dental letter. Thus:

M. तेडा "crooked," Skr. तिर्यक्, but in all the rest टेढा, etc. B. has also तेडा, तेउडा.

M. तुटणें "to break," Skr. चुट्, but in all the rest टूटना, etc.

M. थंडा "cold," H. ठण्डा.

M. दाढी "beard," Skr. दाढिका, H. डाढी.

M. दीठ "glance," Skr. दृष्टि, H. डोठ.

M. दोर "string," H. डोर.

In Oriya we have थटा "joking," H. ठट्टा; थटारी "brazier," H. ठेठरा; ताटी "mat," H. टट्टी.

Under this head may be noticed the curious word for "one-and-a-half," which is as follows in the moderns:

H. डेढ (derph), P. डेउढ, डूढ, and डेढ, S. डेढ़, G. डोहीड, B. डेड, but M. दीढ, and O. देढ, with dental initial.

Professor Weber (Bhagavati, i., 411) would derive this word from अधि + अर्द्ध, i.e. "half in excess"; but there are objections

to this derivation. First, the meaning, "a half more," might apply to any number, as "three and a half," "four and a half," but it is not so used, but only for "one and a half." For "three and a half" and the rest we have साढे, *i.e.* स + अर्द्ध = "with a half." Secondly, this derivation involves the rejection of the aspirate of घ, whereas the rule is just the reverse, the aspirate is retained, and the organic portion rejected; घ would change to ह, not to द. Thirdly, the Prakrit form is *divadḍhe* दिवड्ढे, which points back clearly to द्वि + अर्द्ध; which is exactly parallel to the German idiom *halb zwei, halb sechs*, for "one and a half," "five and a half," in reckoning time by the hour. As a confirmation of this it may be urged that P. and G. retain the labial vowel, which could not come out of *adhi*.

The cerebral initial in most of the languages has probably arisen from a reflexive influence of the ढ.

§ 60. The further transition of the cerebrals and dentals into the semivowel ल is a point attended with some obscurity. The process seems, like so many phonetic processes in the Indian languages, to work backwards and forwards, and to branch out into further collateral developments, as into ऊ, र, and the like. ल is a dental letter, and the change from द to ढ, and then to ल, involving as it does a passage from a dental to a cerebral, and back again to the dental, can only be accounted for on the supposition advanced in the last section, that originally there was no difference between the two classes of sounds, and that subsequently to the rise and establishment of this difference the popular ear has continued to recognize the close connexion of the two, and to be a little uncertain when to use one and when the other.

It is usually asserted by the highest authorities that the ल which makes so great a figure in the past tenses of verbs in nearly all the modern languages is derived from the त of the past participle of Sanskrit, through द, ढ, and र. If this be

so, we should expect to find other instances of the process. One of the reasons for doubting that the Marathī genitive postposition चा is derived from the Hindi का was, it will be remembered, the absence of any other example of the same change (see § 56). It will be well then to inquire whether the transition mentioned above is supported by parallel instances, that is to say, whether there is any well-defined tendency in these languages generally to put their words through such a process.

The change of *t* to *d*, and equally that of *ṭ* to *ḍ*, are well-known and admitted features of the whole group (see § 52). Such a change is merely the usual softening of a tenuis into its corresponding media.

Similarly the change from *d* to *l* is an old-established fact, and occurs in all languages of the Indo-Germanic family. Instances of this change, which took place at a time prior to the definite separation of the two branches of the lingual organ, are given by Bopp and others. Thus Skr. *deha*, "body," = Goth. *leik*; Skr. *dah*, "to burn," = Lat. *lignum*; Skr. *ekādaśa*, "eleven," *dvādaśa*, "twelve," = Goth. *ain-liſ*, *twa-liſ*, our *eleven*, *twelve*, = Lith. *wienolika*, *duolyika*, etc. Skr. *devara*, "brother-in-law," = Lat. *levir*; Skr. *dīp*, "to shine," = Gr. *λάμπω*, Lat. *limpidus*. This change is allied to that from *d* (द or ड) to *r*, as in Latin *meridies* for *medidies* = Skr. *madhyadivasa*. A change from र to ल is frequently met with in all stages of every language of the family.

It is of course only in the limits of the Indian group that we can distinguish between ड and द. I will first give instances of the connexion between ड and ल. Skr. क्रीड "to play" (of which a Vedic form is क्रीळि) appears also in the form खेल, where the ड has changed to ल, and the क has been aspirated, owing to the elision of र. Although in Skr. खेल is said to mean "to move," yet the substantive खेलि clearly means "play," as in Gītagovinda ii. 30. In the opening verse the

word occurs without the aspirate, as केलि "amorous play." In the modern languages H. खेलता, P. *id.*, S. खेलणुं, B. खेलिते, mean "to play," and nothing else, and it is noticeable that M., G., and O. use the cerebral क, having खेलणें, खेलवुं, and खेलिबा respectively. The connexion is not doubtful.

Skr. गुड "a ball," also गोल, H. गोला, गोली "ball," गुडी "button"; all the languages have both forms. M. has both गोल and गोळ, G. only गोळो, O. both ल and क.

Skr. तन्तिड "tamarind-tree," O. तेंतुक, तेंतुली, B. तेतुल.

The reverse process is seen in Skr. ताल "palmyra palm," H., P., M., G. ताड, O. ताळ; Skr. तडाग "tank," Pr. तदाओ, H. तलाव, and so in all, perhaps through the influence of the Persian تالاب, which, however, is itself from the Sanskrit.

Skr. चेट "slave," is first softened to चेड by § 52, and then becomes H. चेला, O., B., M. *id.*, P. चेरा, चेला, S. चेलो, G. *id.*

Skr. पीडनं "pressing," Pr. पीलण, Sapt. A 25; पेझण, *ib.* 264;¹ H. पेडना and पेलना, P. पीडना, पेलणा, and वेलणा, S. पीडणु, M. पिळणें.

Vararuchi makes this process into a regular rule (ii. 23). His examples are—*dāḍima*, *talāo*, *valahi*, for *dāḍima*, *taḍāga*, *vaḍabhi*. डालिम is also used in the moderns, though rarely. To these may be added चुझ "small," from चुद्र, through a lost form चुड, which occurs in the Bhāgavata Purāṇa, probably the same as छोटा: also खेल "to play"; a form of खिड़, and others, already in use in classical Skr.

As illustrative of this connexion, though in the reverse way, may be adduced a peculiar class of causals in Hindi formed by inserting *l* before the characteristic long vowel, chiefly in verbs whose root ends in a vowel. Thus:

खाना "to eat," causal खिलाना.

पीना "drink," ,, पिलाना.

¹ In this latter place the scholiast's rendering *prerana* makes nonsense of the whole verse.

सीना "sew,"	„	सिलाना.
जीना "live,"	„	जिलाना.
चूना "drip,"	„	चुलाना.
सीना "sleep,"	„	सुलाना.
धोना "wash,"	„	धुलाना.
ढोना "carry,"	„	दुलाना.
रोना "weep,"	„	रुलाना.
देना "give,"	„	दिलाना.

and in four instances after consonants.

देखना "see,"	causal	दिखलाना.
सीखना "learn,"	„	सिखलाना.
सुखना "dry,"	„	सुखलाना.
बैठना "sit,"	„	बिठलाना, also बिठालना and बैठारना.

That this ल is not merely inserted to prevent hiatus is proved by many considerations. The modern languages do not object to a hiatus at all as a rule, and if they do at any time endeavour to fill it up, they do so generally by य, ह, or even *anuswāra*, and if the *l* were inserted merely as a matter of euphony, we should not find it after verbal roots ending in a consonant. The form बैठलना reveals the secret, and shows that the ल is merely an interchange with the य or अय, the characteristic form of the causal in Sanskrit. In Hindi generally this *āya*, bearing the accent on the first syllable, changes its *y* into *u*, which, in modern times, drops out, thus Skr. *chalāy* becomes *chalāunā*, and subsequently *chalānā*; but in this little group of early Tadbhavas, the *y* has changed to *l*, just as in Skr. यष्टि = लाठी, and the original forms were undoubtedly सुआलना, पिआलना (the Persian پیاله "cup" recalls this form), and the like, though retained only in the one verb बैठलना.

If we now turn to Sindhi, the same principle is found governing precisely the same verbs, ल in Sindhi is in nine

cases out of ten turned into र, so that in the Sindhi causal affix आर we have the exact counterpart of the Old Hindi आल, now modernized into ला. This affix is used as in Hindi, almost exclusively with verbal roots ending in a vowel. Thus—

पिअण्ण	“drink,”	causal	पिआरण्ण.
जिअण्ण	“live,”	„	जिआरण्ण.
धुअण्ण	“wash,”	„	धुआरण्ण.
डिअण्ण	“give,”	„	डिआरण्ण.

The consonantly terminated root बिह “to stand,” makes in like manner बिहारण्ण, and बिह “to sit” (like H. बैठना), बिहारण्ण; so also, by a curious coincidence, देखण्ण “to see,” makes देखारण्ण “to show.” This syllable *ār* is inverted to *rā* after verbs ending in long *ā*, as खाइण्ण “to eat,” causal खा-रा-इण्ण. A few more verbs with consonantly ending roots also retain this ancient form, as—

सुम्हण्ण	“to sleep,”	सुम्हारण्ण.
सिखण्ण	“to learn,”	सिखारण्ण.
डिजण्ण	“to fear,”	डिजारण्ण.

and the double causals, expressed in Hindi by inserting वा, also universally exhibit the form in *ar*, because the majority of single causals end in *ā*; thus, from खाराइण्ण comes खाराराइण्ण, etc.

Gujarati exhibits the third form in आड, completing the chain; and it is important to observe that this form is found in Gujarati, because that language has separated itself from Hindi in comparatively recent times, and may be not unfairly regarded as little better than one of the Rajput or Jat dialects of Hindi, which through political causes has sundered itself from the parent language, and obtained an independent status.

Gujarati has several methods of forming the causal. After a root ending in a consonant one very common form is आड, as

घटवुं "to diminish," घटाडवुं; after a root with vowel termination वाड, sometimes inverted to वडा: खावुं "to eat," खवाडवुं; केहेवुं "to say," केहेवडावुं; थवुं "be," थवाडवुं, and others.

The र of Sindhi being equivalent to the ल of Hindi, we have thus the two forms, one in ल, the other in ड; and as Gujarati preserves many ancient forms which have been modified in modern Hindi, or altogether lost, it might not be going too far to suppose that both forms were in use in ancient Hindi, and we thus obtain another and widespread instance of the connexion between the two letters.

But to complete this subject it is now necessary to adduce instances of the connexion between द and ल.

Vararuchi gives (ii. 12) a few instances, though he makes no regular rule. They are *palittam*, *kalambo*, *dohalo*, for *pradipta*, *kadamba*, *dohada*. These words do not, as far as I am aware, occur in the modern languages.

Closely connected with this change is that from *d* to *r* in the class of numerals "eleven," "twelve," etc. Thus, Skr. *ekādaśa*, *dvādaśa*, *trayodaśa*, become in Pr. *eāraho*, *bāraho*, *teraho*, etc., and in H. इगारह, बारह, तेरह, and so, with trifling modifications, in all. The form for "sixteen," however, comes round to *l*, as Skr. षोडश (where the द of दश has been cerebralized by the ष of षष्), Pr. सोरह, H. सोलह, P. सोळां, S. सोरंहं, G. सोळ, M. सोळा, O. सोहळ, B. षोल.

The H. पीला might seem to be another instance from Skr. पीत, through पीद. It is, however, merely a contraction from पीतल, through Pr. पीञ्जल (Var. iv. 26).

Further instances are—

Skr. मृद् "to grind," Pr. मल, H. मलना, P. मळना, S. मलणु, G. मळवुं, M. मळणें, O. मळाइबा, B. मलिते.

Skr. नृद् "to push," Pr. णोस्स, not in use in the moderns.

Skr. पद् "to go," Pr. ताल, not in use in the moderns.

The root पत् goes through the whole cycle of changes in

Prakrit, becoming पद्, पड्, वड्, and वल्, but the moderns stop short at पड्.

From the examples given in this and other sections it must have struck the reader that a close connexion, if not a certain degree of confusion, exists in some languages between ल and ळ. This latter letter is very common in O., B., and G.; less in P.; and is not found in the others. Its pronunciation defies description, sometimes it sounds like *rʰ*, again like *rs*, and again merely a harsh *l*. Its point of contact is high up in the palate, near *r*, and the tongue in uttering it is shaped as in uttering the simple *l*. It appears to be capriciously substituted by the vulgar, in those languages where it exists, for the common ल, and in a considerable number of instances this substitution has become the rule, even in classical writers, to the total exclusion of ल in words where the latter should etymologically appear.

Out of a large mass of instances the following may suffice :

Skr. काल "time," M. काळ, G., O. *id.*

Skr. काल "black," P. काळा, G. काळो, M. काळा, O. कळा.

Skr. कुल "family," G. कुळ, M. कूळ, O. कुळ.

Skr. खेलन "play," G. खेळवुं, M. खेळणें, O. खेळिबा.

Skr. गोल "ball," G. गोळ, M. गोळ, गोळा, O. गोळ.

Skr. ज्वलन "burning," G. जळवुं, M. जळणें, O. जळिबा, P. जळणा.

Skr. टलन "confusion," P. टळणा, G. टळवुं, M. टळणें, but O. टलिबा.

Skr. स्थल "place," P. थळ, M., G., O. *id.*

Skr. स्थाल "dish," P. थाळी, M. थाळा, G. थाळो, O. थाळी.

It will be noticed that this letter never occurs initially in any of the languages; and there appears to be no reason for doubting that the sound itself is of non-Aryan origin, notwithstanding the fact that the character ळ is found in Vedic Sanskrit. We do not know how this character was pronounced in those days, beyond this—that it in some degree resembled ढ.

But the equivalent of ढ in the modern languages is not ढ, but ढ्ह, as in उढ्होढा "bridegroom," H. ढुढ्ह; moreover, Panjabi has side by side with ढ a character *r̥h*, which accurately corresponds to the Sanskrit ढ.

This curious heavy *ḷ* is very widely employed in the Dravidian group of languages, where it interchanges freely with *r* and *ḍ*, and it is also found in the Kōle family of Central India. The Marathas and Oriyas are perhaps of all the Aryan tribes those which have been for the longest time in contact with Kōles and Dravidians, and it is not surprising, therefore, to find the cerebral *ḷ* more freely used by them than by others. The appearance of this letter in Gujarati and Panjabi, however, is singular, and difficult to explain. Gujarati has not come into close contact with any non-Aryan tribes except Bhils, who are too few and insignificant to have had any influence on the language; nor has Panjabi, which is surrounded in every direction by other Aryan dialects. Sindhi, which lies between the two languages, and which is spoken by tribes closely akin to the Panjabis, does not possess this sound either; so that its existence in these two languages is a puzzle, only to be accounted for by the supposition that, as the ढ in them both is pronounced *ḍ*, and not also *r̥*, as in Hindi, some character was required to represent the latter sound, and the old Vedic ढ being then, so to speak, out of employment, was pressed into the service. For it must be noted that this ढ does not occur in the modern languages in the same words as in the Vedas.

With regard to the words in which this letter is found, it cannot be admitted that they are all non-Aryan, or even that they form part of that reserve of non-Aryan words which is found even in Sanskrit. It is noticeable in many languages that where a nation gets hold of, or invents, some peculiar sound, it straightway falls in love with it, and drags it into use at every turn, whether there be any etymological reason for it or no. We English, for instance, have dragged our favourite

th into a number of words where it has no business to be ; and similarly the Oriyas and Marathas bring in this beloved ऋ in a great many words where ल should be. I cannot admit that the presence of this letter, therefore, is any argument for the non-Aryan origin of a word, especially as we find it in so many of the simplest and most undoubtedly ancient Aryan words, like कुल, जल, and the rest ; and, as in Marathi, at any rate there often exist side by side the word with ल, used by the learned, and the word with ऋ, current generally, with some additional corruptions, among the vulgar.

I will now sum up what has been said in this and the preceding section about the cerebrals, dentals, and the two forms of ल.

The cerebrals are the harsher, the dentals the softer, forms of the lingual series. The former correspond very nearly to our English sounds, the latter are unlike any sound current in Europe, and have arisen from the debilitating effects of a hot climate.

Originally there were no dentals in the speech of the Aryans, and when the dentals came into existence they did not displace the old Aryan linguals in every case. In some cases the dental was used in classical, the cerebral in vulgar language, while in other cases quite the reverse took place. In the modern languages, one word is often written indifferently with either, as दाँड or डाँड, थान or ठान, though Sindhi prefers the cerebral ड to द, while Marathi and Oriya sometimes use the dental in preference. In the case of ल, we find it arises from a modification of ड, and sometimes even of द, and there are rare cases in which a word runs through a whole series of changes, as त, द, ड, र, ल. Further, we find a curious cerebral ल, which, though it has borrowed the Vedic character ऋ, is not identical in origin with the sound formerly expressed by that character, but is probably of non-Aryan origin, though it is by the vulgar often improperly inserted in

pure Aryan words, which are correctly written with क. From all these circumstances we infer the original unity of all the lingual group, and its affinity to the European dentals.

§ 61. As the last section dealt with क, it will be advisable to take this first, though in alphabetical order it comes third among the semivowels, whose changes and peculiarities form the subject of this and the three following sections.

क is constantly changed to र in Sindhi, when non-initial. Instances are—

Skr. काल "black,"	S. कारो.
„ कुल "family,"	„ कुर, as well as कुलु.
„ गलन "melting,"	„ गरणु.
„ गोल "ball,"	„ गोरो, as well as गोलो.
„ जल "water,"	„ जर.
„ जाल "net,"	„ जार.
„ तालु "palate,"	„ तारु.
„ तोलना "to weigh,"	„ तोरणु.
„ स्थल "place,"	„ थर.
„ पालन "supporting,"	„ पारणु and पालणु.

In the Prakrits the reverse is the case; in nearly all the dialects except the principal or Mahârâshtri र is changed into क. This statement is made among others of the Magadhi dialect. In the modern Magadha country, that is, in Southern Bihar, however, the tendency is decidedly the other way, and throughout the Eastern Hindi area from Oudh to the frontier of Bengal, the rustics constantly pronounce र where क is the correct sound. This I can testify from personal observation during many years' residence in those parts. Thus we ordinarily hear *kariâ* for *kâlâ*, "black"; *thariâ* for *thâlî*, "dish"; *mahirârû* for *mahilâ*, "woman"; *kerâ* for *kelâ*, "plantain"; *kapâr* for *kapâl*, "head"; *phâr* for *phâl*, "ploughshare"; and

this peculiarity is to be noticed occasionally in the speech of the lower orders in other parts of the Hindi area, as, for instance, in Marwari, as *chārnā* "to wander," for *chalnā*. In old Hindi poems many instances may be found, as *lār* for *lālā*, "saliva"; *jangar* for *jangal*, "forest," and the like. In fact, so great is the confusion between these two letters, that they may in some parts of India be said to be used indifferently, and the speakers appear to be unconscious that they are saying र instead of ल.

In Bengal and Orissa quite another change takes place in those provinces; ल is confounded with न by the lower orders almost universally; thus, where the Hindi has लेना "to take," B., though it writes लइते, pronounces नइते, and O. both writes and pronounces नेइबा. Thus also we hear नून for लून "salt," not merely in these two languages, but also in H. and P. H. reverses the process in लंगोटी "a cloth to cover the privities," from नंगा "naked," which is in B. नेङ्गुटि. Further instances in Oriya are नात "a kick," H. लात; नाखराज "rent-free," Ar. لاخراج; नुटी "plundering," Skr. लुंटा H. लूट; नुह "iron," H. लोहा; नुला "maimed," H. लूला. It is worthy of remark that the Bengalis in writing very often make no distinction between ल and न, giving only one crook • to both, and sometimes putting, but as often omitting, a dot when they wish to express l.

ल, when standing alone in the middle of a word, is never omitted. This is true of the semivowels generally, which hold their own much more tenaciously than the strong letters of the five vargas.

§ 62. य is regularly changed to ज in H., P., B., and O., less frequently in M., G., and S. In these three languages य retains its liquid sound of y. (See Ch. I. § 23.) This change is by Vararuchi, ii. 31, confined to initial y; as *jaṭṭhi*, *jaso*, *jakkho*, for *yashṭi*, *yāśas*, *yaksha*. Examples of initial change in the modern languages are—

यानं "going," H. जाना, P. जाणा, G. जवुं (for जावुं, cf. यवुं for थावुं), M. जाणें, but also and more commonly येणें, B. जाइते, O. जिबा (for जाइबा).

योग्य "fit," H. जोग, and so in all. M. also योग.

योचं "yoke," H. जोत, P. *id.*, S. जोटो, G. जोतर, B., O. जोत, M. *id.*

Marathi in a great many instances retains the *y* sound, and the य character. There are, however, to be found many cases where the Hindi rule is followed. These latter are the popular, as distinguished from the learned, words. In G. and S., especially in the latter, the use of initial *y*, though more frequent than in H. and the Eastern languages, is less so than in Marathi.

The stress laid on an initial consonant being greater than that on one in the middle of a word, it is natural that य should be more often changed to ज in the former position than in the latter. When it occurs in the middle of a word, य is generally softened into इ, which combines with the adjacent vowels into *ai* and *e*. This change has been discussed in Ch. II. § 35. In the causal verbs, as has been mentioned above, § 60, it undergoes other changes of an organic nature.

There is, however, one class of words in which य changes into ज in the middle of a word, namely, those mentioned by Vararuchi in ii. 17, words ending with the suffix *añīya*, where the substitution is effected by ज्ञ. This is, however, merely a doubling of the consonant rendered necessary, according to Prakrit ideas, by the shortening of the previous long vowel. Thus *uttarīya* becomes *uttarijñam*, *raṇañīya*, *bharañīya*—*raṇañijñam*, *bharañijñam*. Under this head would come also participial forms in *ya*, as *kārya*, *gamyā*, the former of which appears constantly in the modern languages as a substantive, with the meaning of "a ceremony," "a business," in the forms कारज, कारिज, and काज.

In one instance, often quoted, य is supposed to change into

लः यष्टि=लट्टि; in modern H. लाठ, लाठी, लाटी, P. लट्टा, S. लठी, G. लाठ, लाट, etc., but here I doubt the change. From what I have said under the root रट् (No. 13 of the list given in § 59), it will be seen that there is ground for supposing a connexion between the groups रट्, लट्, etc., on the one hand, and the group यत्, etc., on the other. It seems probable, then, that the Pr. लट्टि, from which the modern languages derive their words, is an independent form from the root लट्. The transition of य into ल may, however, be supported by the case of the causals in *āl*, *ār*, etc., noted in the last section. It is frequently elided when medial.

§ 63. The semivowel र is a very persistent letter, and is never ejected or elided. In Prakrit it is changed into ल in *haladdā*, *chalano*, *muhalo*, *Jukitthilo*, *somālo*, *kahūnam*, *anguli*, *ingālo*, *chilādo*, *phaliḥā*, *phaliho*; for the Skr. *haridrā*, *charaṇa*, *mukhara*, *Yudhishtira*, *sukumāra*, *karuṇa*, *anguri*, *angāra*, *kirāta*, *parikhā*, *parigha*. *Anguli* is not a fair instance, as the word अङ्गुली occurs in Sanskrit. There is very little tendency to change र into ल in the Indians of the present day. The tendency, as I stated under ल, is rather the other way, though writers on the Prakrits affirm that in all the minor dialects र is changed into ल. As far as it concerns the real origin and root-form of words, the matter is one of little moment. If it be true that the cerebral sounds were not originally distinguished from the dentals, then it must follow that the semivowels of the respective groups were identical if there was a time when ड was the same as द; there must also have been a time when र was not sounded differently from ल; and just as in the present day we find that there exists confusion between ड and द, ट and त, so we are prepared to find that there is in the minds of the lower classes in many provinces a tendency to use र and ल as the same sounds. It is of no import, then, whether we take

र as the original, and ऌ as the corruption, or *vice versâ*; we have no right to assume that the form found in classical Sanskrit is the true and original one; rather in the present state of our knowledge we should be disposed to be very sceptical upon this point. I pass by, therefore, the further discussion of this unimportant detail, and proceed to the next semivowel.

§ 64. व. Of changes of this letter into any other there are no examples. It is, however, easily confounded with ब, and it has been thought by some writers that this confusion dates from early times, and that in the Prakrits there is no difference between the two letters. This view seems to me erroneous; we have no means of judging how these two letters were distinguished in pronunciation in early Aryan times; on the one hand, the circumstance that there are two separate characters shows that there must have been two separate sounds; while, on the other, the fact that the character used to represent *b* is so clearly a mere modification of that used for *v* proves that there must have been a very close connexion between the two. It would not be going too far to suppose that in the original Aryan speech there was no difference, but that the grammarians, wanting an unaspirated media for the labial varga, invented this character for the purpose. It is waste of time to speculate about a matter which we cannot hope to solve. The thick coarse writing of an ordinary Indian manuscript is no guide: the little fine line across the loop, which alone distinguishes ब from व, would be put in if there was room for it, and left out if there was not. This is seen, to come to more modern times, in MSS. of the early Indian poets. Thus, in Chând the following readings occur in one page, opened at random, of Tod's MSS.: वर वीर = Skr. वर वीर, जीव = Skr. जीव, प्रतिबिम्ब = Skr. प्रतिबिम्ब, वर = Skr. वर, वरषी = Skr. वर्ष, बज्जि = Skr. वद, विजय = Skr. विजय, बिज्जुली = Skr. विद्युत्. Nothing can

be learnt, it is clear, from such an irregular method of writing as this.

In Chap. I. § 23 will be found the rules of pronunciation of these letters in the various languages, and it will there be seen that the three western languages, Sindhi, Gujarati, and Marathi, still make a distinction between the two.

In Marathi व when initial is pronounced so softly as to approach the sound of our English *w*, and in this situation is commutable with औ and औ. The former method of pronouncing, with व, is said by Molesworth to be less correct than the latter. Examples are—

Skr. औषध “medecine,” vulgo वखद and वगद.

Skr. अमंगल “unlucky,” vulgo वंगळ “filthy.”

Skr. अञ्जलि “a posture of the hands,” औञ्जळ and वञ्जळ.

Skr. अवलम्बनं “hanging down,” औळंबा or वळंबा “a plummet.”

In all words beginning with the preposition *ava*, the Prakrit form would be *o*, and thus in early Tadbhavas which have come down to Marathi through Prakrit the form in *o* is the more correct.

As a rule in all these three languages a word beginning with व in Sanskrit retains व, and one with ब retains the ब. There are, however, a few exceptions, due apparently to the influence of Hindi. Thus:

व्रात “a marriage procession,” M. वरात and बरात.

वसनं “dwelling,” M. वसणें and बसणें.

वक्क “crane,” M. बक्क, बगळा.

वर “good,” M. बरा.

In the first two examples both forms are used, but बसणें is apparently the more common of the two.

When not initial व is commonly softened into *u*, or entirely elided, as—

जीव “life,” Pr. जीअं, H. जी, P. जीउ, S. *id.*

द्व “god,” Pr. देओ, H. देओ or देउ,¹ P. देउ, S. *id.*, B., O. दे (as a family name).

देवर “brother-in-law,” Pr. *id.*, B. देयर, G. देउर, O. देयुर.

It falls out also in the compound numerals from twenty-one to twenty-eight in some languages. Thus, Hindi retains it in चौबीस “twenty-four,” and छब्बीस “twenty-six,” only. The three western languages retain it throughout; the others only in one or two cases, as will be seen from the following list.

	H.	P.	B.	O.	
21	इक्कीस	इक्की	एकिश	एकाइश	S. एकीह, B. also
22	बाईस	बाई	बाइश	बाइश	[एकुस.]
23	तेईस	तेई	तेइश	तेइश	
24	चौबीस	चौबी or °बी	चब्बिश	चबिश	
25	पचीस	पंजी	पंचिश	पचिश	G. पचीस S. पंजीह.
26	छब्बीस	छब्बी	छाब्बिश	छबिश	
27	सताईस	सताई	साताइश	सताइश	
28	अठाईस	अठाई	आठाइस	अठाइश	

It is customary in Hindi to express final *o* after a vowel by व, but this is a mere *compendium scripturæ*, and must not be mistaken for an organic retention or addition of that letter; thus, *jāo*, “go,” is written जाव, but still pronounced *jāo*, दाव = *dāo*, शिव = *shio* or *sheo*.

§ 65. Of the nasals, च and छ, being never used singly in Sanskrit or the Prakrits, except as grammatical signs, do not fall within the compass of the present chapter. Of their use in Sindhi to express *ny* and *ng* respectively, notice has been taken in § 25. ण is substituted for न, in Prakrit fashion, frequently in all the languages, though Hindi is extremely careless in this matter, and constantly uses न where ण should

¹ This word is often written देव, but pronounced *Deo*. It is a common name of men.

more correctly be written. Bengali and Oriya are in writing perfectly accurate in this respect, though it is not always possible to distinguish the pronunciation of the two letters in the mouth of an ordinary speaker. Marathi and Sindhi use ण in the substantive forms of the infinitive in all cases, the former as णे = Sansk. णं, as well as नं, the latter as णु. Panjabi in the same part of the verb oddly enough uses णा in the majority of words, but ना after a cerebral, as क्खेदणा "to bore," but क्खेदना "to vex"; both from क्खेदनं. In other cases also there is much confusion, especially in the hitherto somewhat uncultivated Gujarati, where ण is often needlessly and incorrectly written for न. It is unnecessary to give instances, as this is no regular law of development, but either a following of the similar Prakrit custom, or mere carelessness and ignorance.

म undergoes a remarkable and very important change, by virtue of which many singular words and forms may be explained, and their derivation elucidated.

म is, as will be readily perceived, both a labial and a nasal, and the change consists in separating these two essences, and giving to each a distinct expression. The labial quality of this letter takes the form of व, and the nasal that of anuswāra, thus forming the sound वं, in which the nasal element precedes the labial. This is the first step, of which familiar instances are as follows :

Skr. आम "disease," H. आव, M. *id.*

Skr. आमलक "myrobalan," H. आवला, P. *id.*, S. आविरो,¹ M. अवळा.

Skr. नाम "name," H. नाव.

Skr. ग्राम "village," H. गाव, M. *id.*

Skr. श्यामल "swarthy," H. सांवला, P. *id.*, S. सांवलु and सांविह, M. सांवळा.

¹ For Sindhi insertion of *z*, and for its change of *l* into *r*, see further on.

Skr. कुमार "prince," H. कुंवर, P. कंवर, M. कुंवर.

Skr. कमल "lotus," H. कंवल, P. *id.*, S. कंवलु.

Skr. कोमल "soft," M. कोवला.

Skr. जामातृ "son-in-law," M. जांवाई.

Skr. पाद् "foot," Pr. पाञ्चम्, H. पांव, P. *id.*

The next step is the omission of anuswâra, isolated instances of which occur in all the languages, but especially in Marathi, if we may take Molesworth as an authority in the matter. The use of the anuswâra is very capricious, however, in this combination, owing to the lightness of its pronunciation. I know of no method by which the sound of such words as गांव, सांवला, etc., can be expressed in Roman characters. Those who maintain that the object of transliteration is to enable a person unacquainted with Oriental languages to pronounce a word right, merely from seeing it written in their own characters, will find this class of words rather an obstacle. If there is one method of writing these words more hopelessly wrong and misleading than any other, it is the common English form of "-ong"; our countrymen write वनगांव (वनग्राम "forest-village" = Wootton, *i.e.* "wood-town") "Bongong," and pronounce it so as to rhyme with "song," "long," and the like! Others write *gaon*, which uninstructed English persons would naturally pronounce गेओन्, others again write *gānw*, which is right enough, provided it be first explained that the *n* is nasal, as in French, but who would guess this if not told? The fact is, these words are pronounced exactly like the name of the French city of Laon, that is, as *gaw* with a contraction of the throat while pronouncing the vowel, which has the effect of sending part of the breath through the nose, and imparting a nasal sound to the whole word, so that it is almost impossible to say exactly where the nasal comes in; the word floats in an atmosphere of nasalization, so to speak. A Frenchman would naturally and unhesitatingly pronounce the word correctly

from seeing the spelling *gaon*, but we are not writing solely, or even principally, for the sake of our French neighbours. It would be interesting to see how Messrs. Meadows Taylor and party, who profess to be able so to transliterate an Indian word that any ordinary Englishman shall infallibly pronounce it correctly at sight, would manage this class of words.

To return to our subject, the nasal being so slight and volatile, as I have stated above, it naturally is frequently dropped, leaving only the labial element. Instances are M. नाव=नाम; M. खेव=चेम; also—

Skr. नेमि “circumference,” H. नेव (*neo*), G. *id.*, B. नेत्रो, O. निअ. P. retains the nasal निउं.

Skr. विमान “vehicle,” Old H. बेवान.

Skr. गमन “going,” H. गौना, गौ (for गवना).

Skr. चमर “ox-tail fan,” S. चौर, G. चौरी; sometimes also in H. written चौरी, but generally चौंरी.

Inasmuch as the व in this class of words is always pronounced soft like *w*, and not hard as *v*, it naturally slides into *u* or *o*; thus Skr. नाम=P. नाउं, S. नाउं with double anuswāra, the former of which is the usual Sindhi method of softening down a hiatus, the latter only is organic. H. पांव=P. पाउं; ग्राम=S. गाउं. This is after all perhaps little more than a different way of writing; there is no difference in the pronunciation of the words.

Bengali and Oriya omit the labial entirely in some words, as गां=ग्राम, O. अञ्जला=आमलक; this is because with them अ has already the sound of *o*, so that even omitting the labial does not very materially alter the pronunciation.

In the following words the nasal has been dropped, and the labial amalgamated with the preceding vowel.

Skr. वामन “dwarf,” H. बौना, P. बौणा, B. बाउनिया or बौ०.

Skr. गमन “going,” H. गौना.

Skr. चमर “oxtail,” see above.

Many others may be found sometimes written with आ, at others with अउ or आउ, according to the fancy of the writer.

Skr. स्वामिन् "lord," becomes in H. साई, P. *id.*, S. साई, B., O. शाई, and its compound गोस्वामिन् in like manner H. गोसाई, and so in the rest. M. forms an exception, having गोसावी. In all of these but M., the influence of the following palatal vowel *i* has caused the elision of the labial, leaving only the anuswâra.

Occasionally a vowel, generally *a* or *â*, is substituted for the labial, as—

Skr. रोमन् "hair of the body," H. रोआं, P. *id.*, B. रोआ, S. लूआ.

Skr. धूम "smoke," H. धूआं, P. *id.*, S. दूहां, B. घुयां, O. धूआ.

Skr. भूमि "earth," H. भूई or भूं, P., S. *id.*, G. भोय.

Skr. कृमि "worm," S. किआं.

It might seem proper to connect with this peculiarity of *m* the H. गोबर "cowdung," from Skr. गोमय, through a form गोवय; but it seems more rational to suppose that the Hindi word is a modern compound of गो "cow," and वर "gift" or "blessing." To those who know how useful and highly prized an article cowdung is in India, this latter explanation will no doubt commend itself.

§ 66. In Chapter I. § 24, I have explained the peculiarities attendant on the usage of the sibilants, under the head of pronunciation. Where so much carelessness and laxity exists in writing, not only among the masses, but even among literary men, and in the manuscripts and published works of writers in many of these languages, we can only treat these changes as matters of pronunciation. Whenever a fixed standard of orthography shall have been arrived at, the time will have come to analyze the changes which the sibilants undergo among themselves from a phonetic point of view; at present it be but lost labour to attempt to do so.

For the same reason it is not possible here to take notice of the rules laid down by Prakrit writers on this subject. In the dark ages of India so numerous and conflicting were the changes and migrations of races, that it is no longer worth while to look for the local peculiarities mentioned by the Prakrit grammarians in the places which they assign to them. The whole of the Gangetic Doab, Rohilkhand, and Oudh, with the tract north of the Ganges lying between Oudh and Tirhut, is now peopled by Aryan tribes, who still preserve traditions of their comparatively recent advent into those regions. Northern Tirhut has been won from mountain-tribes, chiefly non-Aryan, in historic times. The Ahirs of Sindh are now found all over Aryan India. The Marwaris, Meds, Jats, and other tribes, have wandered northwards and southwards, westwards and south-westwards, till we can no longer trace them back to their original seats. Mixed races call themselves Rajputs, and claim to come from Chitor or Ajmer, unconscious that their high cheekbones, flat noses, and narrow pig-like eyes, give the lie as they speak to their absurd pretensions.

The use of the sibilant by the various modern nationalities, then, is one of those points on which we wait for more light, and on which premature speculations would be not only idle, but absolutely noxious.

There is one point, however, on which we touch solid ground. The sibilant has a tendency, more or less developed in all the languages, though culminating in Sindhi and Panjabi, to pass into ह. This is a very ancient practice. In the primitive Iranian *h* regularly corresponds to the स of early Aryan.

SANSKRIT.

ZEND.

MOD. PERSIAN.

सा "she,"

há

सप्त "seven,"

hapta

هفت

"thou art,"

ahi

ای

SANSKRIT.	ZEND.	MOD. PERSIAN.
शुष्क "dry,"	<i>hushka</i>	خشک
सहस्र "thousand,"	<i>hazanra</i>	هزار
सृप् "to go,"	<i>hrap</i>	رفتن

It is in complete correspondence with this ancient change that we find the propensity to replace *s* by *h* exhibiting itself in its fullest force in those parts of India which lie nearest to the Iranian frontier, namely, the Panjab and Sindh. In these two languages the *s* is not only changed to *h*, but occasionally even entirely thrown away. A few examples out of many hundreds are here adduced :—

SANSKRIT.	SINDHI.	PANJABI.	OTHER PAGES.
कर्पास "cotton,"	कपाह, कपह	कपाह	
केशरी "lion,"	केहरि	केहरी	H. <i>id.</i>
कोश "a kos" (league),	कोझ	कोह	
पेषण "grinding,"	पीहण	पीह	
पौष "December-January,"	पोझ	पोह	
आषाढ "June-July,"	[आषाडु] ¹	हाड	
श्वशुर "father-in-law,"	सझरो	सउहरा (सझरा)	
श्वास "breath,"	साझ	साह	
विंशति "twenty" (Pr. बीसा)	वीह	बीह	
एकविंशति "twenty-one,"	एकीह	इक्की	
त्रिंशत् "thirty" (Pr. तीसा)	ट्रीह	चोह, तीह	
एकत्रिंशत् "thirty-one,"	एकट्रीह	इकत्ती	
एकषष्टि "sixty-one,"	एकहटि	इकाहट	[etc.
एकसप्तति "seventy-one,"	एकहतरि	इकहत्तर	H. इकहत्तर

It has been remarked before that all these languages show

¹ In this word the ख may be a hardening of ह, or, on the other hand, merely a different way of writing ष; see the remarks further on in this section.

their common origin, if that were doubtful, by the fact, among others, that hardly any process or tendency exists in any one of them which may not be traced, however faintly, in nearly all. This is true in the present instance. In every one of the languages some few examples may be found of this change, though the tendency, so strong in Western India as to become a rule, has been so weakened as we go eastwards, that in Bengali and Oriya only a few faint examples can be adduced.

In the series "sixty-nine," "seventy-one," and so on to "seventy-eight," the स of सप्तति is changed to ह in all the languages. I do not give the list here, as it will occur in Chapter IV., which see.

As an example, though a somewhat doubtful one, of this change running through all the languages, the word *pahār* "mountain," may be noticed. Its forms are H. पहाड B., O. पाहाड, M., G., P. पहाड. The final ड points to an older ट, which would be softened from त, so that I would derive the word from a Sanskrit form प्रसृत, treated as प्रसर्त, according to the usual method of treating ऋ in ordinary colloquial speech. The meaning would be "stretched out," "long," "vast," and this is the more appropriate, as the word is generally applied to a mountain range, rather than to an isolated hill or peak.

Another instance is the local Hindi word पोहे "cattle," only used in the western Hindi area, from पशु. Another local word in Eastern Behar is गोहाल "cowshed" = गोशाला, B. गोहाली. More may be found here and there, but few which run through the whole seven languages.

There is, however, one important series which is noticed by Vararuchi ii. 44, consisting of दश "ten," and its compounds *ekādaśa*, etc. In these the ष is regularly changed to ह. Pr. *daha*, *cāraha*, *vāraha*, etc., for *daśa*, *ekādaśa*, *dvādaśa*, and the rest. Thus, "eleven," which may serve as a specimen, is H. इगारह, ग्यारह, P. गियारां, S. चारहूँ, कारहूँ, G. अगिआर, M. अकरा, O., B. एगार.

The ह is retained in writing only in H. and S. In P. and M. the long *ā* has taken its place, and in the rest it has disappeared.

Before leaving the sibilants, some notice must be taken of a change, the reverse of that mentioned in § 58, whereby क् becomes स in Marathi, and analogous to that mentioned in the same section as prevalent in Bengal, in such cases as कुंच for सूचि, कुतार for सूचधार, and others. Vararuchi ii. 41, gives *chhatṭṭhī* for *shasṭṭhī*, *chammuko*=*shanmukha*, *chārao*=*śāraka*, *chhattavanṇo*=*saptaparna*. Modern instances are—

Skr. षष् “six,” Pr. क्, H. क्, P. के, S. कह, G. क्, M. सहा, B. क्य, O. कञ्.

Skr. षष्ठ “sixth,” Pr. कट्टो, H. कट्टा, P. केवां, S. कहो, G. कटो.

Skr. शावक “child,” Pr. कावञ्चो, H. कोकडा, P. *id.*, कोहरा, S. कोकडो, M. कावडा, G. कावो, कोकरो, B. का, कां, काञ्चोलामि, काबाळ, कालिया, केलिया, कोकडा, etc., O. कुञ्चा, का pl., टोका.

In Bengali a good many of these words may be found, which, when supported by the analogy of the cognate languages, may fairly be treated as *bonâ fide* examples of this rule; when not so supported, however, as the majority are not, they may be set down as careless spelling.

ष is in H. and P., and occasionally in the other languages, pronounced *kh*, though still written ष; in fact, on seeing this character in an old Hindi MS., one would naturally pronounce it *kh*. This is not merely a matter of writing however. Several words which in Sanskrit have the ष are now regularly pronounced with *kh* by the peasantry, to whom the written character is entirely unknown. Thus भाषा “language” is pronounced *bhākhā*, and even sometimes written भाखा; वर्ष “rain,” is बर्खा, and from it is formed a verb बरखना “to rain.” Similarly we find हरख and हरखना from हर्ष “joy”; मेख from मेष “a ram”; बिख from विष “poison.” Hence also M. भाक्, a cor-

rupted form of भाष "a promise," Skr. भाषा. मेख "a big strong fellow," from मेष "a ram." विख is also used by the vulgar for विष, as in H. The origin of this custom lies probably in the already mentioned connexion between the sibilants and ह, which latter is hardened to *kh*, as in Persian.

§ 67. ह is a favourite letter with the moderns, and is rarely elided. One instance is given by Trumpp from the Sindhi, Skr. सहर्ष "joyful," becomes सरहो through a form सहरसो = सहरहो. This is not, however, common. In some Prakrit books ह is used to fill up the gap made by the rejection of a single consonant between two vowels, and a few instances may be found in which it has remained till modern times (Weber, Saptas. p. 28). Thus O. पाही "a pai" (the coin), H. पाई, Skr. पादिक. It is sometimes inserted without cause, as O. महन "a maund weight," H. मन, M. मण, Skr. मान. As a rule its tenacity is greater than that of any other letter, and it is pronounced clearly with a somewhat harsher aspiration than in other languages.

This letter in Sanskrit roots is often merely a softening of an aspirate. ग्रह is originally ग्रम्, ह is भृ, हृष = भृष्, हृदय probably from खर्द्, नह् = नध्, वह् = वध्, perhaps also वध्, रह् = रध्. Some of these older forms, as *grabh* and *bhri*, are preserved in the Vedas, and with regard to the others the analogy of forms in the cognate languages shows that the aspirate has been dropped, while in many it reappears in various tenses of the verb. In harmony with this practice, cases are found in the modern languages in which *h* after anuswâra, which is in that position a guttural, changes into *gh*, as in सिंह "lion," which is pronounced *singh* in all the modern languages, and often written सिंघ in H., and always so in P. Thus also the Prakrit forms अम्हे, तुम्हे "we," "ye," become in Oriya अम्मे, तुम्मे, where the *h* is changed into the sonant aspirate of the organ to which the nasal belongs.

§ 68. From ह we pass by a natural transition to the aspirated letters of all the organs. It has been seen that on the one hand the unaspirated letters are extremely liable to elision, while on the other ह holds its place always very firmly. From the combination of these two principles, it comes to pass that the aspirated letters frequently lose their organic characteristic, and remain as simple ह, the aspiration alone surviving to represent them. This is a rule of very general application, both in Prakrit and modern times, and is one by which we may distinguish early from late Tadbhavas with tolerable accuracy. It is not, however, of equal force in all aspirates. Vararuchi lays it down as "usual," that is, not absolute, in the cases of ख, घ, च, छ, भ, omitting the palatals, cerebrals, and फ. The omission of the palatals is accounted for, first by the tenacity which has been noticed as their characteristic in § 51, and secondly by the fact that these letters क्ख and क्ख, though they occur in Sanskrit, represent as a rule sounds of a later origin, being developed out of older sounds, as च, छ, or others. Although these letters are found in Sanskrit writings of an early period, yet their secondary or derivative character can hardly be doubted, ज्ञ in particular is a very rare letter in Sanskrit, while it is extremely frequent in Prakrit. This letter has two or three forms, being written sometimes झ, at others ञ, and at others again ञ; all this shows that it is of modern origin, and gives rise to the suspicion that it scarcely had a fixed and recognized position in the old Indian scheme of sounds, until the Pandits began to work at the language, when, in accordance with their usual custom, they would invent a letter where none existed previously, to avoid leaving any gap in their series, just as they did with च्च and च्च. We can derive no argument from the existence of letters on monuments of the earlier type, Asoka's, Gupta, or Kutila (though it may be observed that ज्ञ does not occur in Kutila), because the art of writing was a matter of comparatively recent introduction, and

does not affect phonetic changes in the spoken languages. In the case of the cerebrals their hardness probably preserved them, and they too are somewhat secondary in character, being, as has been explained before in § 59, old linguals preserved at a high point of contact by the influence of र or some other letter, and consequently regarded by Pandits, who worked at a time when the usual lingual contact of their nation had passed down to a lower point of contact, as in some way derived from the dentals, an erroneous view, in which they have been followed by many European scholars.

Thus, इ, झ, ढ, and ढ, were, to a great extent, popular letters; they had already passed into Prakrit, or rather had their origin in Prakrit; they had come into recognized existence, so to speak, lower down the stream than the point at which the other aspirates had lost their organic characteristics, and were thus safe from further change.

As to फ, a very little carelessness in uttering it makes it into *f*, and however wide apart these two sounds may be when pronounced carefully, or when considered scientifically, the personal experience of every one who has lived in this country will support the assertion that they are daily and hourly confounded by ordinary speakers. Who ever heard फिर, फल pronounced by the lower classes in towns otherwise than as "fir," "fal"? or if not quite with the *f* sound, at least with something very closely approaching to it, and only by purists, or in remote parts of the country, with the clear undoubted *ph* sound? To this cause—namely the more complete amalgamation of the aspirate with the organic sound—may doubtless be attributed its preservation. It is softened to भ, which letter in Eastern India is constantly regarded by the natives as equivalent to our English *v*.

The aspirates, it must however be remembered, are never considered as mere combinations of an ordinary letter with *h*. It is quite a European idea so to treat of them; *kh* is not a

k-sound followed by an *h*, it is a *k* uttered with a greater effort of breath than ordinary. The native name for the aspirates is *mahâprâṇa* "great breath," as opposed to the lenes or *alpaprâṇa* "little breath," letters. The European method of speaking is used in this section as being likely to be more familiar to the reader; but it must ever be borne in mind that the aspirate is uttered by one action of the mouth; there is not the slightest stop or pause between the *k* and the *h*; in fact, no native ever imagines that there is a *k* or an *h* either in the sound. The difference between खाओ "eat," and कहाओ "cause to say," is extremely well marked, even in the most rapid speaking. Thus Vararuchi, in his rule above quoted, ii. 27, does not say that ख and the rest retain only their aspirate. Such an expression would have been quite unintelligible to himself and his scholars. He says ह is substituted for ख, etc. He looks upon ह as quite a distinct letter, and exhibits no consciousness of there being an *h* involved or contained in the ख already. The Indian ख then differs entirely from क + ह on the one hand, as much as it does from the Arabic ح on the other.

Thus क + ह are two distinct sounds, and are always sounded as such. ख is a क uttered with a greater expenditure of breath than ordinary. च is a guttural uttered deep down in the throat, and having no real aspiration in it at all, beyond this that the *makhraj*, or place of utterance of it, is so low down in the throat as to be quite on the extreme edge of that region of the palate within which the guttural sound lies, and approaching the confines of that region within which there is no organic utterance any longer, because no possibility of contact, but merely aspiration or simple forcible passage of air.

We may now proceed to give examples of the change, which, as it is one which passes through the Prakrits into the modern languages, may be exhibited with special regard to the latter, the former being merely inserted when they occur, because in this, as in so many other cases, the words most frequently in

use in the Prakrits are not by any means those which are most commonly met with in the moderns.

§ 69. ख is changed to ह in the following instances :—

Skr. मुख "face," Pr. मुहं, H. मुंह, P. मुऊं, मूऊं, S. मुंऊं.

Skr. लिख् "to write," Pr. लिह, M. लिहिणें.

Skr. आखेट "hunting," H. आहेड, P. हेडां, S. आहेडो.

Skr. सखी "female friend," Pr. सही, S. सही.

In all these cases, however, there exist forms in ख, thus all the languages still use मुख; in all but M., the usual form is लिख, as in H. लिखना, though Gujarati omits the *i*, and has लखवुं. आखेट is also still in use, and सही is only in use in Sindhi; all the other languages retain the word सखी, which, however, is no longer a colloquial, but merely a literary and poetic word.

घ.

Skr. स्लाघा "praise," Pr. सलाहो, H. सराहना, P. सराहणा, S. सराहणु.

Skr. अरघट्ट "a well-wheel,"¹ P., H. अरहट, रहट, M. रहाट, S. अरट्ट, अट्ट, G. रेट.

Skr. जघन "loins," Pr. जहणं, P. जहिणा, S. जहणु, M. झंवणें (for जहंवणें); all in the sense of *coïre*.

Skr. मेघ "cloud," Pr. मेहो, H. मेंह, मींह, P. मींह, and मीहं, S. मींऊ.

This letter is also frequently retained, as in घोडा = घोटक, घुमना = घूर्णनं, घडा = घट, and split up and inverted in सुहागा "borax" = शोघनं, through सोगहनं and सोहगनं. A similar instance is बहिन for भइन, from भगिनी, H. सिंघाडा, root of the esculent water-lily," P. *id.*, S. सिंघोरो, G., B., and O. सिंघाडा, from Skr. संघटिक, is an instance of the protective

¹ The so-called "Persian wheel," used all over the Panjab and in parts of Hindustan to draw water for purposes of irrigation. It has a string of earthen pots which go down empty and come up full, and tilt over into a trough.

power of the anuswâra, of which more will have to be said hereafter.

य.

Skr. शपथ "curse," Pr. सवहो, H. सोंह (see § 52).

Skr. गाथा "song," Pr. गाहा, Old H. गाहा, S. गाह.

Skr. कथनं "saying," Pr. कहणं, H. कहना, P. कहिणा, S. कहणु, G. केहवुं, O. कहिवा, B. कहिते. Singularly this very common word in all the other languages is totally wanting in M.

Skr. प्रथर "prior," H. पहिला, P., M., O., B. *id.*, G. पेहलुं, S. पहरीया.

Instances of the retention of य are M. कथणं = कथनं, which is, however, rare, P. कथणा, S. कथणु, in the altered sense of "to think." गांथना = ग्रंथनं, here, again, through the influence of anuswâra. मथना "to churn," मथनी "a churning-stick" = Skr. मथनं, and with the cerebral H. मठा "buttermilk," though H. has also महना "to churn"; M. मथणं, मंथणं, माथन; B. मथन, मथिते, माठा "curds"; G. मथवुं, मथरी, मठो "curds," etc.; S. मथ, मथणु. Skr. यूथ "herd"; H. जूथ is almost a Tatsama, though found in Old Hindi; P. has the more usual form जूह.

घ.

Skr. बधिर "deaf," Pr. बहिरो, H. बहिरा, M., O. *id.*, B. बहेरा, G. बेहेरो, S. बोडो.

Skr. दधि "curds," Pr. दहिं, H. दही, and so in all.

Skr. साधु "merchant," Pr. साझ, H. साझ, B., O. *id.*, P. साह, साह, S. शाह (through a confusion with Pers. شاه, often used as a title by certain castes).

Skr. वधू "wife," Pr. वझ, H. बह, B. वउ, M., S. वह, G. वझ, S. वोझ, O. बझ.

Skr. गोधूम "wheat," H. गोऊं, गेऊं, S. गेऊं, B. गोम, गम, O. गम (*gōmō*).

Skr. गोधा "lizard," "iguana," H. गोह, P., S. *id.*, G. गो.

This letter being a media, and as such more liable to elision than any tenuis, exhibits fewer instances of retention than the others. Such are युध, H. जुध, जोधापन, etc., though the more usual form taken by this root in all the languages is जुझ, as in H. जुझार "a warrior," etc.; धोबी "washerman," Skr. धावक; Skr. धवल "white," H. धौला, B., O., धला, G. धोकुं, S. धौरो, M. धवा, धवळ. Skr. ध्मा "to blow," Pr. धुमा, B. धमका "bellows," H. धौकनी, S. धौकण "to kindle," G. धमण. In the case of initial ध, many instances may be found among genuine Tadbhavas.

भ

is, like घ, a letter which affords a very large range of instances of elision:

गभीर "deep," H. गहिरा, and so in all.

आभीर "herdsman," H. अहीर, M. *id.*

भू "to be," Pr. हो, H. होना, P. होणा, S. ऊअण, G. होवुं, M. होणें, O. होइबा (हेबा), B. होइते.

भाण्ड "pot," H. हांडी, P. *id.*, S. हंडी, G. हांडी, M. *id.* and हंडी, B., O. हांडी.

शुभ "to be fair," H. सोह "ornament," सोहन "pleasant" (शोभन्त°), सोहना "to heseem," S. सुंह "beauty," सुंहण, सुहाइण, सुहाइतो, etc., P. सुहाउणा, सुझणा, etc. M., B., and O. retain the forms in भ in common use. G. follows the Hindi, but has also शुभ and derivatives.

सीभाग्य "beauty," H. सुहाग, सुहागा, P., S. *id.*

भुण्ड "bond," H. ऊंडी, and so in all.

Here may also be introduced H. लेना "to take," which I suppose to be from an earlier form लहना, as is shown by S. लहण, from Skr. लभ्. The S. proves this to be the origin of the word by retaining the passive participle लधो, which is from the Skr. p.part. लब्ध. लेना is to be explained as in the first instance for लेना, which is identical with the form लेणा, in use now in Panjabi, from लहिणा, cf. रहिणा, etc., in Ch. II.

§ 35 ; in B. लेहते, O. नेवा, from the confusion between न and ल. There is a rarely used Skr. root ला, which would produce लेना, on the analogy of देना, from दा, but I prefer the derivation from लम्, both on account of the doubtfulness of the root ला, and because it brings the Hindi more into conformity with the other languages. The reader may choose for himself. S. has also another verb लाहणु from a root लाभ, forming its passive participle लाथो (= लाभित = लाहित = लाथो), which lends additional confirmation to the derivation. The old H. p.p. लीना may be held to point to a form लभित through लहीत (त = द = ड = ल = न).

It will be observed that Grimm's law of positional changes holds good to a great extent in the case of these aspirates. While they are frequently, nay almost regularly, changed into ह in the middle of a word, a process equivalent to the elision of the non-aspirated letters, since they lose all their organic portion, retaining only the aspiration common to all, they are on the other hand, when occurring as initials, almost as regularly retained. The most striking exception is the case of न, which is often changed to ह in the beginning of a word, as in the instances given above. Here too, however, there is a parallel to the case of the non-aspirated labial ब, which, as we have seen, possesses peculiar weaknesses, and is more liable to absorption, liquefaction into a vowel, and other hard treatment than the letters of any other organ. Such a point as this is one of those landmarks which are so cheering to the student, pointing as it does, however dimly and obscurely at present, to the existence of deep underlying laws, which a longer research and more intimate acquaintance with these languages will enable us eventually to unearth ; so that we may hope, in spite of the terrible gap of so many centuries, one day to have discovered the whole phonetic system of this group in all its ramifications, and triumphantly refute those sciologists who talk so confidently of the "lawless licence" of Hindi derivation.

We now come to the unchanging aspirates **झ, ञ, ठ, ढ**, and to a certain extent **फ**. It is not perhaps strictly correct to apply the epithet 'unchanging' to any but the first two. No instances of the change of these two exist, either in Prakrit or in the moderns. **ठ** is not elided, but passes often into its media **ढ**. Instances (Var. ii. 24) are *maḍham*, *jaḍharam*, *kaḍhoram*, for *maṭha*, *jaṭhara*, *kathora*. As so often happens, these examples do not occur in the moderns, or rather these words, the first of which is common, the last two rare, are found in their Sanskrit form *maṭh*, etc., in most languages. M. has a diminutive **मढी** side by side with **मठी**. The word means a "monastery," or college of devotees. Modern instances are—

Skr. **पीठा** "stool," H. **पीढा**, P. *id.*, S. **पीडही**, G. **पेढी**.

Skr. **पठन** "reading," H. **पढना**, P. *id.*, S. **पडहणु**, G. **पढवुं**, M. **पढणें**, O. **पढिवा**, B. **पढिते**.

Skr. **शुण्डि** "ginger," P. **सुंढ**, S. **सुढि**.

Skr. **कण्ठी** "necklace," S. **कंढी**, P. dimin. **कंढुली**.

More examples will be found in Chapter IV., in cases where **ठ** is a secondary formation—that is, where it has arisen from some earlier form, as **ष्ट, स्थ**, or the like.

There is an isolated instance of **ठ** passing into **ह**, in Skr. **कुठारा** "axe," G. and S. **कुहारी**; but here we have properly the same process as in **पठन = पढना**, namely, that the **ठ** has been softened into its corresponding media **ढ**, and that again into **ह**, in G. and S. the **क** has been dropped. In H. the form is **कुहारी**, P. **कुहंदा** and **कुहाडा**, M. **कुहाड**, O. **कुहाडी**. B. shows the transition in the colloquial form **कुढूल**. **ढ** does frequently pass into **ह**; in fact, from the earliest Sanskrit times there is a close connexion between the two sounds, the point of junction being a sound **ळ** *lh*. The same relation exists between the unaspirated letters, as in the Vedic **इडा =**

इका. In the Vedas ढ is often written ळ. The most familiar example in the modern languages is—

Skr. उद्बोढा “bridegroom” (Ved. °बोह्वा), H. दुह्वा, B. दुलीन, दुलाई.

Skr. उद्बुढा “bride,” H. दुहिन, G. दुलाही “daughter” (= दुहवाई).

Cases in which ढ is wholly elided do not occur, at least none have yet been discovered and established.

In Prakrit we have a somewhat similar change (Var. ii. 25), *ankolla*=*ankottha*; here the aspirate appears to have been lost, and the *l* doubled. The root *vesht* is also said to be changed to *vella* when preceded by *ud* or *sam* (Var. viii. 41), which gives us another instance, as we know that *vesht* becomes first *vetth*, and subsequently *vedh*, as Vararuchi himself states in the preceding section (viii. 40). These changes are again, as in the case of *bh*, quite in analogy with the changes that take place in the corresponding unaspirated letters, so that everywhere, however feeble and indistinct may be our light, we are yet justified in asserting the thoroughly homogeneous, and consequently distinctly national and characteristic nature of all the phonetic changes we meet with.

फ is softened to भ in Prakrit in *sibhā*, *sebhālā*, *sabhart*, *sabhalam*, for *śiphā*, *śephālā*, *śaphart*, *saphala*. In the modern languages one of these is found श्परी “a carp,” H. सहरी, P. सउठ. The letter is, however, more generally retained, being of comparatively rare occurrence in the middle of a word, with the exception of compounds, which must be treated as two separate words for our present purpose.

Judging from the constant tendency of all languages to pass their words through a gradual process of softening, it may rationally be conjectured that the aspirated tenues ख, क, ठ, च, फ, would first be softened into their corresponding mediæ, and then into simple ह. We have given evidence of this process in the case of ठ and फ, which indeed go no further than this first step as a rule; but it may be as well to seek for instances

in the other letters, with a view to establishing still further the harmony of transition throughout the aspirates.

Panjabi and Sindhi are the most promising fields for this part of the inquiry, as they both particularly affect medial letters in opposition to tenues; the search, however, is not to be confined to those languages alone.

ख into घ.

Skr. शृङ्खल "chain," P., S. संघर, G. सांघळ.

Skr. रेखा "stroke," S. रेधी "cunning" (*i.e.* "strokes" of villany), M. रेघ "line," G. रेग.

झ into झ. This change is indicated by the extreme points, rather than by the intermediate stage. Thus, when we find H. झामा "vitrified brick," or "slag," derived from Skr. चाम (चै), it is apparent that there has been an intermediate form झामो. So also, in deriving Skr. झरी "a waterfall," from the root चर् "to stream," there necessarily intervenes a form झरी.

थ into ध. The examples adduced of this transition are complicated by the fact of the presence of र, which cerebralizes the ध into ढ. So that from प्रथम, regarded as पर्यम, we get Pr. पढम for पधम. Similarly Skr. शिथिल "loose," becomes in Pr. सिढिलो, which is explained by the origin of the word from the root अथ्, a form of which is झथ्. The moderns use this word with rejection of the whole of the first syllable. Thus, H. ढीला, M., G. *id.*, P. दिझा, S. दिरो, B., O. ढिला.

To these may be added S. गंढि = Skr. ग्रंथि, where again the influence of the *r* is felt.

The modern languages, however, are not always careful to follow the above processes. Marathi in particular, and the others in a minor degree, exhibit in a sporadic and somewhat disconnected manner a tendency to drop the aspiration, and to use only the unaspirated form of the letter. This is more frequently observable in the middle or at the end of a word, and in Bengali more particularly with cerebrals, as ढ, when

pronounced as *r̥h*. The rule holds good whether the aspirate be in existence in Sanskrit, or have arisen from some Pr. change.

Examples :

Skr. विघटन "destruction," H. बिगडना "to be spoilt," P. वगडना, S. बिगडण, G. वगडवु, B., O. *id.*; here M. in contrast to its usual custom retains the aspirate, as बिघडणें, बिघाडणें.

Skr. महार्घ "dear" (in price), H. महंगा, P. महिंगा, S. महंगो, M. नहाग, but G. मौंघुं.

Skr. पीठा "stool," B. पिडां, M. पाट.

[H. बुझाना "to extinguish" (§ 46),] B. बुजान, M. बुजणें.

Skr. हस्त "hand," Pr. हत्य, M. हात, instead of हाथ, B., O. *id.*

Skr. हस्ती "elephant," Pr. हत्थी, M. हाती for हाथी, B., O. *id.*

Skr. संध्या "evening," Pr. संझा, M. सांज for सांझ, G. *id.*

Skr. संधि "junction," M. सांद.

Skr. स्कन्ध "shoulder," M. खांदा, G. खांद.

Bengali instances of ड for ढ are बेडा=H. बेढा, from Skr. वेष्टन, where the outgoing ष aspirates the ठ in all languages; मोडा "stool,"=H. मोंढा; साडे=H. साढे "with a half," Skr. सार्द्ध, M. also साडे; B. and O. सिडी, M. शिडी "ladder,"=H. सीढी, from Skr. श्रिष्टि; B. डाड, डाडी=H. डाढी, Skr. दाढिका.

Instances in Oriya of the same tendency are the following :

Skr. कच्छप "tortoise," O. कचिम.

Skr. घुष्टिक "a cake of cowdung," O. गुइंठा, where the aspirate has been thrown forward into the ट.

Skr. कपित्थ "the wood-apple tree," O. कइत, H. कठबेल.

Skr. कुठार "axe," O. कुटाडी.

Skr. दाढिका "beard," O. दाडि.

Skr. पृच्छा "question," O. पचारिबा.

The general treatment of the aspirates in the modern languages has by some authors been thought to betray signs of

non-Aryan influence, on the ground that this treatment shows an aversion to aspiration, which is seen also in the Dravidian languages which have no aspirates. But I do not see, in the first place, how the rejection of the organic portion of an aspirated letter and the retention of the rough breathing can be called an aversion to aspirates; on the contrary, it seems to me to be a great fondness for them. An aversion to aspirates would testify itself, not by changing *kh* into *h*, but by changing it into *k*, which is precisely what our languages do not do, except in a few Bengali and Marathi words.

Moreover, although there are no aspirates in the Dravidian languages, there are in all the non-Aryan dialects of the Himalayas and in the Gondi of Central India. Tibetan also possesses the aspirated surds, though not the sonants; and some of the sub-dialects of Tibetan indulge in aspiration to a greater extent than Sanskrit, as they aspirate not only the consonants of the five organs, but even semivowels and nasals. Thus, Magar *mhen*, "fire," *rha*, "goat," *wha*, "fowl," *mhut*, "blow," are examples of aspirations which are never met with in old Aryan.

Thirdly, it may be pointed out that so far from having any aversion to the aspirates, the colloquial languages from the earliest Prakrits downwards indulge in a variety of aspirations, regularly changing the sibilants of Sanskrit into *h* under almost all circumstances. Instead of attributing to the Prakrits a dislike of the aspirate, and ascribing this characteristic to non-Aryan influence, we should be disposed to consider an excessive fondness for this class of sounds as one of the most marked Prakrit features, and one in which it is very strongly contrasted with the Dravidian languages, though harmonizing in this respect with the non-Aryan dialects of Tibetan origin which are still spoken in the recesses of the Himalayas.

§ 70. Visarga is conspicuous by its absence from all the

modern languages. It was at best a mere grammarian's fiction, to be classed with ञ, ऌ, and such like inventions. In the nominative case of nouns it replaces the organic स, with which that case properly terminates, and has in Prakrit given way to *o* or *e* in Sanskrit nominatives in *as*, while it has been entirely dropped in nominatives in *is*, *us*, or other vowels. In the various parts of the verb in which it occurs no trace of it can now be found, inasmuch as the modern verb has entirely abandoned the ancient inflectional method of formation, and has adopted the analytical system of participles and auxiliaries; even in those tenses where some relics of the synthetical system exist, the dual having been entirely rejected, the visarga with which its three persons ended has been lost, and in the first person plural so great has been the change that it is difficult to decide whether the visarga has really had any influence or not.

Where visarga exists in the middle of a word, as in दुःख "pain," and in words compounded with the preposition निस्, the ruder languages reject it altogether and write simply दुख, निस्वास for दुःख, निःश्वास. In those languages which have a double form, one literary, the other popular, the former of course retains the visarga, the latter does not.

Anuswâra is used throughout to replace the nasal when it forms the first element of a nexus. In Bengali and Oriya, however, there is an exception to this rule, anuswâra in them being merely a nasal and pronounced always *ng*, never under any conditions *m*, as some German writers have of late taken to write it. To a Bengali the transliteration *amśa* would be quite unintelligible, as the word is to him *angsha*. Even in reading Sanskrit the custom is to pronounce this mark as *ng*; thus, इदं निवेदनं would be read *idang nibedanang*. There is nothing further to remark on this character.

§ 71. This chapter may be concluded by a few instances in which a whole syllable of a word has been inverted. This sort

of corruption is common among the lower orders all over India. Thus, for Pers. **مَطْلَب** *matlab*, a favourite pronunciation is *matbal*. The constant, though unconscious, striving to give some meaning, or reason for a meaning, to a word often results in these curious changes. To the Hindu peasant *matlab* conveys no intrinsic or esoteric meaning, but when reversed it seems quite natural that *matbal*, i.e. **मति + बल**, "strength of the intellect," should be a phrase for "aim," "object," etc. I have heard this word corrupted to *man talab*, "search of the mind," *talab* being more familiar than its derivative; *ant kâl* for **إِنْتَال**, in the sense of "death," is also quoted as a similar case by one writer. Examples of this inversion are as follows:

Skr. **क्षेपण** "throwing," Pr. **खेप**, H. (inverted and with the aspirate thrown back to the initial) **फेकना** "to throw," P., G. *id.*, S. **फकणु**, M. **फेकणें**, O. **फिंगिबा** and **पकाइबा** (with total rejection of aspirate and *e*).

Skr. **बुल्** "to be drowned" (connected is **बुड्** "to cover"), H. **डुवना**, P. **डुवणा**, S. **टुबणु**, M., G., B., O. *id.* All the languages have also the form **बुडना**, etc., as well.

Skr. **पिधा** (from **अपिधा** "to cover") H. **झांप**, **झांपना**, also **धांपना**, and so in all.

Skr. **दीपशय्या** "candlestick" (literally "candle-bed," because in an Indian lamp the wick *lies* in a cup full of oil), B. **पिल्सज** (= **पीड** for **डीप**), O. *id.*

Skr. **प्राघूर्णन** "visiting," H. **पंऊंचना** "to arrive," in Tirhut **चऊंपना**.

Many more inversions of this kind will readily occur to the memory of readers acquainted with these languages, though such words are not generally found in dictionaries, being looked on, with some justice, as merely local corruptions arising from ignorance or caprice. It will be seen, however, from the instances given above that a recognition of the existence of this tendency is sometimes useful as pointing the way to the derivation of a word which might otherwise remain unknown.

CHAPTER IV.

CHANGES OF COMPOUND CONSONANTS.

CONTENTS.—§ 72. ANCIENT AND MODERN ARTICULATION.—§ 73. THE NEXUS—ITS THREE CLASSES.—§ 74. THE STRONG NEXUS.—§ 75. "SAPTAN" AND ITS DERIVATIVES.—§ 76. "UD" IN COMPOSITION.—§ 77. THE MIXED NEXUS.—§ 78. NASALS IN A MIXED NEXUS.—§ 79. TREATMENT OF च.—§ 80. THE SIBILANTS IN A MIXED NEXUS.—§ 81. TREATMENT OF ज.—§ 82. SIBILANTS IN COMBINATION WITH DENTAL AND CEREBRAL STRONG LETTERS.—§ 83. SEMI-VOWELS IN A MIXED NEXUS; र AND ल.—§ 84. THE SAME; य AND व.—§ 85. य, र, AND व IN COMBINATION WITH DENTALS.—§ 86. THE WEAK NEXUS.—§ 87. NASAL WITH NASAL.—§ 88. NASAL WITH SEMIVOWEL.—§ 89. NASAL WITH SIBILANT.—§ 90. SEMIVOWEL WITH SEMIVOWEL.—§ 91. SEMIVOWEL WITH SIBILANT.—§ 92. ह IN COMBINATION WITH OTHER WEAK LETTERS.—§ 93. RELATIVE STRENGTH OF THE WEAK LETTERS.

§ 72. THE treatment of compound consonants involves some curious considerations on the subject of the power of articulation possessed by the human organs of speech in ancient and modern times. Sanskrit in this respect resembles all the early languages of its family, inasmuch as it is rich in combinations of consonants in groups of two, three, and even occasionally four, without any intervening vowel. We find the same state of things in the Semitic family also; the Aramaic group, which is now generally admitted to represent the oldest type, clusters its consonants together in a way which at times almost defies pronunciation; the Hebrew, which stands second in point of antiquity, is less addicted to this practice, having several

contrivances, such as *sh'va*, for avoiding too great an accumulation of consonants, while in the Arabic, a group of a much later type, to use Renan's expression, "the consonants swim in a sea of vowels"; comparing Aramaic forms, such as *ktalt*, *ktaln*, *mektlan*, *khnun*, with the Hebrew *kētaltā*, *kātalnū*, *kātēlenā*, *anakhnu*, and Arabic *katalatā*, *katalnā*, *inkīdālanā*, *nakhnu*, the gradual increase of vowels is clearly seen. This instance is adduced merely as an illustration of what is meant by the power of articulation. To utter a series of consonants, each of which requires a separate contact, without allowing any vowel to intervene, is an effort of the organs of speech which can only be accomplished when those organs are vigorous and strong. Thus we find the Dravidians of the south of India unable to pronounce Sanskrit words containing a compound consonant without the insertion of one or more vowels. For instance, in Tamil, *istiri*=Skr. *strī*, *tānam*=Skr. *sthānam*, *kiruttinan*=*krishna*, *appirayōsana*=*aprayojana*, *tātuva*=*tatva*. "The languages of the Indo-European class are fond of combining clashing consonants and welding them into one syllable by sheer force of enunciation; and it is certain that strength and directness of character and scorn of difficulties are characteristics, not only of the Indo-European languages, but of the races by which those languages are spoken. On the other hand, the Dravidian family of languages prefers softening away difficulties to grappling with them; it aims at ease and softness of enunciation rather than impressiveness: multiplying vowels, separating consonants, assimilating differences of sound, and lengthening out its words by successive agglutinations; it illustrates the characteristics of the races by which it is spoken by the soft, sweet, garrulous effeminacy of its utterances."¹ Within the domain of the Indo-European family, however, there are many degrees of power in this respect. In the highest grade are to be placed the old Aryan, Latin, and old

¹ Caldwell's *Dravidian Grammar*, p. 139.

German. In the next Zend, which is a degree weaker than Sanskrit; Greek, which can bear less consonant-clashing than Latin; and Slavonic, which interpolates vowels with greater frequency than its Teutonic neighbour. Weakest of all are the modern Romance languages, and the Indian Prakrits. And, considering the subject chronologically, each stage of every language is, as a rule, less capable of elaborate articulation than that which preceded it. And this brings us back to our immediate subject: just as the Prakrits effeminately soften or omit single consonants from Sanskrit words, so, in the case of compound consonants, they have recourse to several devices for avoiding the effort of uttering them. Here again, however, the modern Indian languages are stronger than the Prakrits, in many cases exhibiting a greater power of consonantal articulation, though always weaker than the original Sanskrit. In modern Tadbhavas indeed, in which no trace of Prakrit influence is to be expected, the amount of softening or weakening is not very great, not more so than in modern English as compared with the English of a thousand years ago. Take for instance a passage from King Alfred's translation of Gregory's Pastoral:¹ "Ne sceal he noht unalyfedes dón, ac thæt thætte othre menn unalyfedes doth he sceal wepan swæ swæ his agne scylde, hiora untrymnesse he sceal throwian on his heortan, and thæs godes his nihstena he sceal fagenian swæ swæ his agnes." This would run in modern English thus: "Nor shall he nought unallowed (unlawful) do, and that that (that which) other men unallowed do, he shall weep so so (as) his own guilt (Germ. *schuld*, Dan. *skyld*, our *guilt* for *sguilt*), their untrimness (infirmity) he shall dree in his heart (sympathize with), and of the good of his next (neighbour) he shall fain (rejoice) so so (as) of his own." The words in parenthesis are the modern way of expressing the word which they follow, which is the etymological equivalent of the old English. Now the modern

¹ P. 60, ed. Sweet, Early English Text Society, 1871.

languages differ very little more from Sanskrit, and sometimes not so much as 'unallowed' from 'unalyfedes,' 'dree' from 'throwian,' 'next' from 'nihsta,' or 'fain' from 'fagenian.' It must be remembered that the earliest of modern Tadbhavas, dating from the wane of Buddhism, are about contemporaneous with Alfred, while early Tadbhavas are of course far more ancient. It is necessary to bear this in mind, because some writers have asserted that the modern Indian languages have deviated far more widely from their primitive type than the European languages, and have argued from thence that the former are now more hopelessly corrupted and confused than the former. It may be replied that the rate at which development has proceeded seems to be the same in both cases, and that climatic influences, while they determine the direction of that development, do not accelerate it. When we find an Indian word much more extensively changed than we can produce a parallel for in European languages, the reason is generally to be found in the fact that the process has been going on for a much longer time in India than in Europe. Certain it is that some of the Prakrits exhibit at times extreme forms of corruption, but reasons have been given for doubting whether these Prakrits were ever spoken; and from the example of the Bhâgavatî, we may conjecture that when more texts come to light, they will confirm what is now only a suspicion, that in the two leading points of hiatus and assimilation the real spoken languages of those times did not go so far as the literature would make us believe. The hiatus caused by the elision of single consonants is an attempt to reduce the labour of speaking, and quite parallel to it is the process of assimilation, which will now be explained, both processes being exemplifications of the fact that as a rule modern articulation is simpler and less harsh than ancient, and that especially in the case of consonants, whether compound or single, there is a tendency to reduce their number and simplify their enunciation

running through all the languages of the Indo-Germanic family.

§ 73. For the purpose of expressing the combination of two consonants without the intervention of a vowel, as in *kt*, *pl*, *sn*, the term "nexus" is employed. Three kinds of nexus may conveniently be distinguished :—

(1.) The strong nexus, composed of strong letters only, as क्त, म्न, ज्ञ, द्र, त्प, ग्ध.

(2.) The mixed nexus, composed of a strong and a weak letter, as च, न्द, ध्य, झ.

(3.) The weak nexus, composed of weak letters only, as श्र, ह्र, म्र, ण, ल्व.

By strong letters are meant the first four letters of the five vargas :

क, ख, ग, घ.

च, छ, ज, झ.

ट, ठ, ड, ढ.

त, थ, द, ध.

प, फ, ब, भ.

By weak letters are meant the nasals ङ, ज, ण, न, म; sibilants श, ष, स; semivowels य, र, ल, व; and ह. The combinations च and झ, so often treated as single letters, I include under the mixed nexus.

The laws of these three kinds of nexus are briefly as follows :

(1.) In the strong nexus the Prakrits assimilate the first letter to the last, and the modern languages, except Panjabi and Sindhi, reject the first of the two letters and in general lengthen the preceding vowel.

(a) Where the second member of the nexus is an aspirate, Prakrit changes the first member into the corresponding unaspirated letter.

(β) Where the nexus is followed by a long or heavy syllable, the modern languages do not always make the compensatory lengthening of the preceding vowel.

(2.) In the mixed nexus the weak letter, whether preceding or following the strong letter, is in the Prakrits assimilated to it; and in the moderns one of the two letters is rejected, with the usual compensatory lengthening of the vowel.

(a) When the weak letter is a nasal and precedes the strong letter, it is changed to anuswâra; in Prakrit without, and generally in the moderns with, compensatory lengthening of the vowel.

(3.) In the weak nexus three processes take place :

(a) When the two letters are of unequal strength, the weaker is assimilated, as in the mixed nexus.

(β) When they are of equal or nearly equal strength, they are divided from one another by the insertion of a vowel; or,

(γ) They are combined into a third and entirely different consonant.

A table of the relative strength of the weak letters will be found in § 92.

Certain and accurate laws for all these three processes can hardly be expected at the present initiatory stage of the inquiry, but the examples to be hereafter given will fairly substantiate the tentative rules now laid down.

The whole of this part of the development of the modern languages seems purely Aryan, and may be paralleled by corresponding changes in the other languages of the family, as, for instance, the modern Romance languages of Southern Europe. As none of the non-Aryan families in India are prone to the use of compound consonants, their influence can hardly be looked for in this branch of the inquiry. It is, however, held by some writers, who are never easy unless they can drag in some hint of non-Aryan influence to account for

changes which require no such explanation, that the weakness of Dravidian enunciation, which forbids the use of any complex accumulation of consonants, is parallel to the weakness which led the Prakrits to assimilate *kt* into *tt*. As, however, the Italians do precisely the same, it is not evident why non-Aryan intervention should be suggested. There is a process in Prakrit, carried on into the moderns, which certainly does resemble Dravidian customs, namely, that of splitting up a nexus by the insertion of a vowel; when the custom is discussed it will be seen how far this supposition is true; at any rate it has become of late years quite a nuisance, this perpetual suggestion of non-Aryans here, there, and everywhere; one will soon have to believe that the Aryans did not know how to speak at all till the Dravidians taught them the use of their tongues, and that the Vedas are a mangled copy of some ancient Tamil liturgy!

§ 74. THE STRONG NEXUS.—This form of nexus is not so common as the others. The number of groups of two letters each, which can be formed by combinations of twenty letters, is in itself small, and is further in practice limited by the euphonic laws, which forbid the union of a media with a tenuis, and the placing of an aspirate as the first member of the nexus. Some organs, also, are incapable of combination with others; and of other combinations which would be euphonicly permissible, the Sanskrit language affords no examples. The actual instances, therefore, of the strong nexus are comparatively few.¹

Vararuchi's way of handling this process is rather extraordinary. He considers that of two consonants in a nexus the

¹ Portions of this section on the strong nexus appeared in the *Journal of the Royal Asiatic Society*, vol. v. p. 149. Having, however, been led by further research to modify some of the views which I expressed in that article (written in 1868), I have had to remodel a great part of it, so that the actual reprint includes very little more than the examples.

first is elided, and the second doubled. He also omits all mention of च, ज, ट, and ब. In spite, however, of his uncritical way of putting it, it is clear that he means to lay down the same law as that given above. ब he confuses with व, which being a weak letter would, in any case, whether preceding or following, be assimilated to the other member of the nexus. This is clear from his examples. Thus, Skr. लुब्धक *lubdhaka*=Pr. लोद्धओ *loddhao*, and Skr. पक्व *pakwa*=Pr. पिक्क *pikkam*; Skr. लुब्ध *lubdha*=Pr. लुद्धो *luddho*.—Var. iii. 51.

As to ट, it so seldom occurs as the first member of a nexus (except in combinations where षष् “six,” constr. षट् forms the first element), that Vararuchi probably thought it useless to mention it. Similarly I am not aware of any cases where the palatals form the first member of a nexus. By Sandhi they would migrate into gutturals in composition; e.g. त्वच् *twach*+दोषिन् *doshin*=त्वग्दोषिन् *twagdoshin*, वाच् *vāch*+य *ya*=वाक्य *vākya*. So that probably no instances exist of palatals as initials in a nexus. Vararuchi's examples are: भक्त=भक्तं, सिक्थक=सित्यओ, मुग्ध=मुद्धो, स्निग्ध=सिणिद्धो, खड्ग=खग्गो, षड्ग=सज्जो, उत्पल=उप्पलं, etc.

Lassen (p. 239) repeats Vararuchi for the most part, but shows some consciousness of the difference between a strong and a weak nexus. He gives (p. 235) five classes of nexus, among which is No. II., “Complexus consonantium quaternarum ordinarum,” which corresponds to my “strong nexus.” His list of examples is different from Vararuchi's, but does not add anything to the general rule already obtained from the Indian author.

Hoefer, de dialecto Prakritā, p. 90, § 73b, gives a list of words in which the Sanskrit form of the nexus is retained in Prakrit, but this list has no value, as it rests upon incorrect readings. The principal instance is समित्कुस in Vikramorvaṣi (110, 2, Calcutta edition), which Lassen concludes to have arisen “ob negligentiam editorum,” or, perhaps, rather from

the proclivity of the scribe towards Sanskrit forms, a fertile source of bad readings in the plays. We should undoubtedly read **समिद्ध**°. Hoefer's work does not appear to be one of much value.

If now we turn to Pali and the Prakrit of the Jain writings, we find the same principle carried out. Instances from the Dhammapadam and Bhâgavatî are, **पृथग्जने**=**पुथुज्जणे**, **ज्ञप्तं**=**णत्तं**, **पुद्गलं**=**पुग्गलं** (or in Bhâg. **पोग्गलं**), **सप्तन**=**सत्त**, **सप्तषष्टि**=**सत्तट्ठि**, **कुञ्ज**=**खुय्य** (कुञ्ज is probably for **कुभ्ज**, hence the aspirate).

Pali seems to have the best claim to be considered as pure Magadhi, and in the Mahawanso, one of the chief works in that language, we find the same rule, e.g. **वत्तयं**=**वत्तद्धं**, **प्राप्त**=**पत्त**, **युक्त**=**युत्त**. Numerous instances may be collected from every page of the Mahawanso, or any other Pali work. The rule is apparently absolute and without exception, so much so, that any deviations from it may at once be set down as errors of copyists.

There seems to be no good ground for supposing that the last member of a strong nexus is ever assimilated to the first. The examples given by Hoefer rest chiefly on incorrect readings, as shown by Lassen, and no such proceeding can be discovered in any of those works of which original MSS. are available.

In the modern languages a good many of the examples given by Vararuchi occur :—

खड्ग *khadga*, “a sword,” Pr. **खग्गो**, Var. iii. 1. H. 1st, **षग्ग**, Chand, Prith. 15, 24, **लग्गयौ षग्ग उडि हथ्य ते** “He attacked, raising sword in hand”; 2nd, **खाग** (but only used for the horn of the rhinoceros, for which also **खद्ग** is used); 3rd, **खड्ग** (*kharag*); 4th, **खांड** (*khând*). M. 1st, **खद्ग** (rare); 2nd, **खंडा**; 3rd, **खांडा**. P. *deest*, S. **खनो**, G. **खाडुं**, B. **खडग**, O. **खंडा**, deriv. **खंडाइत** “swordsmen.”¹

¹ The forms **खांड** and the like are probably connected with **खण्ड**. We cannot consider them as derived from **खड्ग**.

मुन्न *mudga*, "a sort of pulse"¹ (*Phaseolus mungo*), Pr. मुग्गो, Var. *ib.*, H. मूग, M. मूग (also as a Tatsama मुन्न, but rare), S. मुङ्ग (*muṅgu*), O. मूग (*mūgo*), G. *deest*, P. मुंग or मुग्ग, B. मुग (*mugō*).

दुग्ध *dugdha*, "milk," Pr. दुद्ध, H. दूध, M. and G. दूध, O. दुध, P. दुह्, S. डोधि, B. दुध, दुह्, दुदु. M., G., and B. have also the Tatsama form in pretty common use.

मुन्नर *mudgara*, "hammer," Pr. मुग्गरो. This word is used in two senses in the modern languages. (a) Late Tadbhava, = an athlete's club for exercising the muscles. H. मुग्दर (मुग्दर), M. मुद्गल्, S. *deest*, G. मग्दल, O. and B. मुग्दर and मुन्नर, P. मुग्दर. (β) Early Tadbhava, = a washerman's mallet for beating clothes. H. मूगरा and मोगरा, M. मोगर ०रा, and ०री, S. मुडिरो, G. मोगर and ०री. The latter form is clearly the older of the two.

शब्द *śabda*, "a word," Pr. सहो, Old H. साद, H. सबद and शब्द, M., S., G., and B. शब्द (not very frequent, except in B.), P. *deest*, O. शबद (*śōbdō*).

कुब्ज *kubja*, "crookbacked," Pr. खुज्जो and खुथो. H. 1st, कुब्जा; 2nd, कुब्जा; 3rd, कुबड़ा (*kubrā*, commonest form). M. कुबड़ा (in the Wāḍi dialect, खुबड), G. कुबडो (both in M. and G. खुबडा is "the snail," i.e. humpback), S. कुबो, P. कुब्जा and कूबा, O. कूजा, B. कुज, कुंज, and कुज्ज.

मुग्ध *mugdha*, "foolish," Pr. मुद्धो. मुग्ध occurs in M. and B., but in the others the form in use is मूढ, from the Skr. मूढ, which is the other form of the p.part. of मुह्.

भक्त *bhaktam*, "boiled rice," Pr. भत्तो, H. भात्, M. and G. *id.*, S. भतु, B. and O. भात, P. *deest*.

सिक्थक "beeswax," also generally any soft wet substance. Pr. सित्थओ, H. सीठ "indigo refuse," but सीथ "boiled rice," M. सीत "boiled rice," P. सेट, सेठ "expressed sugar-cane."

¹ Erroneously in all the dictionaries as a kidney-bean, which it in no way resembles; it is a sort of millet.

The class of words containing the nexus क्त *kt* is rather numerous, but does not present many interesting features; a few examples follow:—

भक्त *bhakta*, “a devotee,” Pr. भक्तो, H. भक्त, M., and B. भगत् and भक्त, G. भगत, S. भगत्, P. भगत्.

मुक्ता *muktā*, “a pearl,” Pr. मुक्ता, H. मोती, M. मोती, G. मोती, B. and O. मोति, B. also मुक्ता, मोक्तिका, and मति, S. मोती, P. *id.*

रक्त *rakta*, “red,” Pr. रक्तो, H. राता, M. *id.*, when it means “red,” but रक्त when meaning “blood,” S. रतो, G. रातु, P. *deest*, O. and B. रक्त in both senses.

In the above examples the duplicate consonant of Prakrit is retained in P. The lengthening of the vowel with rejection of one consonant occurs nearly always in the rest. S., though it writes only one consonant, pronounces two, as P. does; this accounts for the short vowel being retained.

The Sanskrit words शक्ति, व्यक्ति, पक्ति, भक्ति, मुक्ति, पङ्क्ति, occur as Tatsamas in nearly all the languages, but with slight modifications in some. They do not, however, offer much that is noteworthy.

§ 75. The most common and most varied exemplification of this kind of nexus is to be found in the word *saptan* “seven,” and its numerous derivatives. The whole of them are given here in full as a good example of the harmony of the whole seven languages, a harmony all the more striking on account of the slight local peculiarities, “not like in like, but like in difference.”

सप्तन् *saptan*, (oxytone),¹ “seven,” Pr. सप्तो, H. सात्, M. and G. सात, B. and O. सात (pronounced *shātō*), S. सत, P. सत्त. B. and M. also Tatsama, but rarely used.

¹ But see Bopp, *Vgl. Acc. System*, p. 45, § 29; the modern languages appear to have treated it as paroxytone.

सप्तम *saptama* (oxytone), “seventh,” Pr. सत्तमो, H. 1st, सतं (Chand, Prith. 1, 5); 2nd, सातमौ (Braj); 3rd, सातवां *m.*, वीं *f.* (modern). M. same as H. 3rd., G. सातमो—मी—मुं, S. सतों—तों, P. सत्तवां—वीं, B. and O. सप्तम.

सप्तदश *saptadaśan* (accent on first syll.), “seventeen,” Pr. सत्तरस. H. सत्रह (*satraha*), modern सतरह (*satarah*), M. सत्रा or सतरा, G. शतर, S. सत्रहँ, P. सतारां, in respect of the long vowel it stands quite alone; B. सतेर, O. सतर.

सप्तदश: *saptadaśaḥ* (*id.*), “seventeenth,” H. सत्रहवां or सतरहवां—वीं, M. सत्रावां—वीं—वें, G. शतरमो—मी—मुं, S. सत्रहों, P. सतार्हवां and ०मां, B. and O. सप्तदश, or B. सतेर (same as the number for “seventeen”).

सप्तति *saptati* (oxytone), “seventy,” Pr. सत्तति, सत्तरि, हत्तरि, H. सत्तरि (Braj), सत्तर (mod.), M. सत्तर, G. सीतेर, S. सतरि, P. सत्तर, B. सत्तर, O. सत्तोरि, in which it stands alone (M., B., and O. also indulge in their favourite pedantry by using सप्तति occasionally).

सप्ततितमः *saptatitamaḥ* (oxytone), “seventieth,” H. सत्तर्वां—वीं, M. and P. *id.*, G. सीतेमो—मी—मुं, S. सतर्यो (*satarryo*). B. and O. the Skr. form.

It is next necessary to observe the curious modifications which the word for “seventy” undergoes when it occurs as the last member of a compound word.

“Seventy-one.”

“Seventy-two.”

Skr. एकसप्ततिः *ekasaptatiḥ*.

H. इकहत्तर *ik + hattar*.

बहत्तर *bahattar*, and so on.

M. एकाहत्तर *ekā + hattar*.

बाहत्तर *bāhattar*, etc.

G. इकीतेर *ik + oter*.

बोहीतेर *bohoter*, etc.

S. एकहतरि *eka + hatari*.

बोहतरि *bbohatarī*, etc.

P. इक्हत्तर *ik + hattar*.

बहत्तर *bahattar*, etc.

B. एकात्तर *ek + āttar*.

बाहात्तर *bāhāttar*, etc.

O. एकस्तोरि *eka-stōri*.

बास्तोरि *bāstori*, etc.

Also the still greater transformations of "seven," when it is the first member of a compound, *e.g.* :

"Twenty-seven."

Skr.	सप्तविंशतिः <i>saptaviṁśatiḥ</i>
H.	सताईस <i>satāīs.</i>
M.	सत्तावीस <i>sattāvīs.</i>
G.	शतावीस <i>śatāvīs.</i>
S.	सतावीह <i>satāvīh.</i>
P.	सताई <i>satāī.</i>
B.	साताईश् ¹ <i>sātāīs.</i>
O.	सताईश <i>satāīśo</i> (<i>shotaiśho</i>).

"Thirty-seven."

सप्तत्रिंशत् <i>saptatrinṣat.</i>
सैंतीस <i>saintīs.</i>
सततीस <i>sattīs.</i>
साडतीस <i>sāḍtīs.</i>
सतट्टीह <i>sataṭṭih.</i>
सैंची <i>saintrī.</i>
साईचीश् <i>sāīntrīs.</i>
संदतिरिश <i>sanitirīśo.</i>

"Forty-seven."

Skr.	सप्तचत्वारिंशत् <i>saptachaturīṁśat.</i>	सप्तपंचाशत् <i>saptapanchāsat.</i>
H.	सैंतालीस <i>saintālīs.</i>	सतावन <i>satāwan.</i>
M.	सत्तेचालीस <i>sattetchālīs.</i>	सत्तावन्न <i>sattāvanna.</i>
G.	सूडतालीस <i>sūḍtālīs.</i>	सतावन <i>satāwan.</i>
S.	सतैतालीह <i>satetālīh.</i>	सत्वंजाह <i>satwanjāh.</i>
P.	संताली <i>santālī.</i>	सतवंजा <i>satavanjā.</i>
B.	सात्चालीश् <i>sātchalīs.</i> ²	सातान्न <i>sātānno.</i>
O.	सत्चालिश <i>satchalīśo.</i>	सतावन <i>satāvano.</i>

"Sixty-seven."

Skr.	सप्तषष्टिः <i>saptashashṭiḥ,</i>
H.	{ सरसठ <i>sarsaṭh.</i> सतसठ <i>satsaṭh.</i>
M.	सत्सष्ट <i>satsashṭ.</i>
G.	सड्सेठ <i>sadseṭh.</i>

"Seventy-seven."

सप्तसप्ततिः <i>saptasaptatiḥ.</i>
सत्हत्तर <i>sathattar.</i>
सत्याहत्तर <i>satyāhattar.</i>
सीतोतेर <i>sītoter.</i>

¹ Bengalis and Oriyas pronounce the स as *sh*, so that *śātāīs* would be perhaps a better transliteration, and so throughout the series.

² Or सायतालिश्.

“Sixty-seven.”

- S. सतहृठि *sathathī*.
 P. सताहृट *satāhaṭ*.
 B. सातषट्ठि *sātṣhaṭṭhi*.
 O. सतषठि *satṣhaṭhi*.

“Seventy-seven.”

- सतहृतरि *sathatari*.
 सतत्तर *satattar*.
 सातात्तर *sātāttar*.
 सतस्तोरि *satastori*.

“Eighty-seven.”

- Skr. सप्ताशीतिः *saptāśītiḥ*.
 H. सतासी *satāśī*.
 M. सत्यांयशी *satyānyashī*.
 G. सतासी *satāśī*.
 S. सतासी *satāśī*.
 P. सतासी *satāśī*.
 B. साताशी *sātāśī*.
 O. सताशी *satāśī*.

“Ninety-seven.”

- सप्तनवतिः *saptanavatiḥ*.
 सतानवे *satānave*.
 सत्याणवे *satyāṇave*.
 सताणू *satāṇū*.
 सतानवे *satānave*.
 सतावनं *satānaveṇ*.
 सातानव्वई *sātānabbāī*.
 सतानोइ *satānoī*.

The series of “seven” and its derivatives belongs to the class of early Tadbhavas, in so far as it has everywhere lost its first member प. This is only natural; a numeral being, next to a pronoun, the most commonly used description of word, and hence not to be changed by authoritative interference, such as I have assumed in the case of modern Tadbhavas.

The variations may thus be analyzed :—

सत्त° *satta-*, in the words “seventy,” “seventieth.”

सात° *sāt-*, in the words “seven,” “seventh.”

सता° *satā-*, in the words “twenty-seven,” “fifty-seven,” “eighty-seven,” “ninety-seven.”

सैं° *sain-*, in the words “thirty-seven,” “forty-seven.”

सत्° *sat-*, in the words “seventeen,” “sixty-seven,” “seventy-seven.”

And in Gujarati साड°, सूड°, सड°, सीत°. In M. सत्ते°, सत्य°;
 S. सते°.

Of these, सत्त° is simply the assimilated form of the Prakrit period, which in the compounds modulates into हत्तर, a form which is found even in Prakrit. This word is noticeable as the solitary instance in Hindi of a change of the initial स into ह, though in Panjabi the change is so common as to be regular (see Chapter III. § 66).

सात् is the regular form of the early Tadbhava class, like भात् and others. In सता we have rather a curious phenomenon which requires fuller analysis; the words are सताईस्, सतावन, सतासि, सतानवे, etc. In Prakrit we do not uniformly find the long *ā*, e.g. *sattavīsatimo*, "twenty-seventh," but *sattānave*, "ninety-seven." But there is a remarkable uniformity in all the seven modern languages. We find the long *ā* in all of them for "twenty-seven"; in all but P. and S. for "fifty-seven"; in all for "eighty-seven" and "ninety-seven."

Judging at first from सताईस् only, and the Hindi chiefly, I thought this abnormal long *ā* arose from the व of विंशति amalgamating with the inherent *ā* of सप्त, first from *av* (*saptavinsati*) into *au* (*sattauts*), and thus, according to the usual Hindi analogy, into *ā*. But this suggestion broke down in two ways: 1st, Because the Marathi has both the long *ā* and the *v* in सत्तावीस; so also have the Sindhi and Gujarati: and 2nd, Because we have the long *ā* in words where there existed originally no *v* to coalesce with it into *au*.

The opinion I am at present most inclined to is that the presence of the long *ā* is due to the accent of the Sanskrit. *Saptan* is undoubtedly oxytone, and though I have not been able to find in the dictionaries or other published works any instance in which the accent of *saptavinsati* is given, yet I have no reason to doubt that, as in Greek, the accent remains in the compound word just as it stood on each member when separate. In Greek the rule which forbids us to place an accent further back than the ante-penultima obscures the analogy; but in Sanskrit we have no such restriction, and *sāptavinsātti*, with the

minor accent on the penultima, and the major on the pre-ante-penultima, is quite possible. Assuming this, and seeing that the two last syllables *ati* have disappeared, the word would fall into the form of a paroxytone, and the accent on the syllable *ta* being the only one left, would assume such prominence as to insure its remaining long throughout the ages.

We next come to the curious form **सैं**, only found in "thirty-seven" and "forty-seven." In these two sets of numbers we find that all the odd numbers except the first take this form in *ain*, thus :—

33 तैंतीस *taintīs*.

43 तैंतालीस *taintālis*.

35 पैतीस *paintīs*.

45 पैतालीस *paintālis*.

37 सैंतीस *saintīs*.

47 सैंतालीस *saintālis*.

The other languages offer only faint indications of similarity. P. has **सैंची**, B. **साईचीश**, O. **संडतिरिश**, but none of the others. I think it has arisen from a sort of rhyming propensity sometimes observable in Hindi. From **ते** or **तै** the transition to **तैं** was easy, the insertion of the nasal in season and out of season being a weakness of that language. In the word for "thirty-five" they had at first *panchatrinśat*, which soon got altered into *panchtīs*; but here they had a strong nexus, **च + त**. The **च** therefore dropped out, and the resulting double **त** was reduced to a single, and the preceding vowel compensatorily lengthened, so that the form **पांतीस** arose; to make which rhyme with the word for "thirty-three" would be irresistible. So also the "thirty-seven," which was probably **सात्तीस**, was dragged into the scheme, and became **सैंतीस**.

The form **सत** is found in "seventeen," "sixty-seven," "seventy-seven." In "sixty-seven" the word was originally *saptāśhūshṭik*, with two accents close to one another, the latter of which, so to speak, kills the former, so that when by the usual Prakrit process the first member is modified into *satta*, the second *a*, being atonic, falls out; and though the first *t* also

falls, yet, as it is in the beginning of a word with a heavy termination, no compensatory lengthening can take place.

In "seventy-seven" we ought to have सत्ता, and probably such a form did once exist, but was crushed into *sat* by the weight of the double *tt* of *hattar* so close after it. Only Marathi retains a form *satyâhattar*. Similarly the form for "seventeen" was originally *sattârah*, and is so still in Panjabi; perhaps some obscure idea of its similarity in sound to *sattar*, "seventy," may have operated in the minds of the people to shorten it.

The G. forms with ड are to be accounted for by the already described proclivity of dentals to turn into cerebrals; but why this tendency should exhibit itself in this particular instance it is difficult to say, the only thing at all cognate to it is the र in H. सरसठ, which would be more correctly written सडसठ; in this place it is easy to see that the cerebral arises from the influence of the ठ in सठ. G. has accordingly सडसठ. What makes the matter more obscure is that the cerebral letter occurs precisely in those two series where we should least expect it, namely, in those which begin with a dental, and where, accordingly, it would be natural that the त of सात should assimilate itself to the following homogeneous consonant. It must be remembered that Gujarati has emerged from the position of a Hindi dialect closely akin to Marwari, and that it still retains traces of its rustic origin in the sometimes inexplicable irregularity of its forms.

§ 76. Another rich class of examples of this nexus is formed by the words to which the preposition उद् or उत् is prefixed. This word having a consonantal termination coalesces into a nexus with the first consonant of the word following, giving rise to such forms as the following :

Skr. उद्गार "spitting," H. उगाल, P. उगाहूणा, S. उगारणु, G. उगाल and ओगाल, B. उगर, O. Tatsama.

Skr. उन्नमन "going up," H. उगना (from उगौना), G. उगवुं, P. उगमणा and उगणा, S. उगवुं.

Skr. उज्ज्वलन "heating," H., P. उबालना "to boil over," G. उभारवुं, S. उबिरणु, उबारणु, M. उबाळा, B., O. उबलन.

Skr. उद्धारण "unloading," H. उभारना, P. *id.* and उभराना, S. उभारणु, M. उभारणे, B. उभरण, O. *id.*

Skr. उत्थान "arising," H. उठना, and so in all.

The noticeable point in this class of words is that, though they have universally rejected the double consonant which arose out of the assimilation of the first member of the nexus to the last, they have nevertheless not lengthened the preceding consonant. Thus, उद्धार would become in Prakrit उगार, and by rule should be in H. उगार. The reason of the absence of the usual compensatory lengthening is that in verbal nouns of the forms given above the accent rests on the syllable of the root; so in *bhāraṇam*, *jvālanam*, etc., it would be on the first syllable, and consequently, when preceded by a preposition, the vowel thereof must needs be short. Hindi is excessively sensitive on this subject: vowels are shortened when followed by long or accented syllables, or by such as contain a heavy mass of consonants, or they are lengthened when conditions the reverse of those occur. As a rule, Hindi, when rejecting one of two assimilated consonants, always, if it can, lengthens the preceding vowel. If it does not, we may be sure there is some cause for its not doing so; and if this cause cannot be found in a succeeding long vowel or a heavy termination, it will probably be discovered in the accent.

The other languages follow to a certain extent the same course as Hindi, Bengali, and Oriya; especially the former leaning towards long vowels, and Panjabi and Sindhi markedly towards short ones.

§ 77. THE MIXED NEXUS.—This nexus differs from the strong

nexus in this important particular—that whereas in the latter the first consonant is always assimilated to the last, in the former the weaker consonant of the two, whatever its position in the nexus, is assimilated. It is singular that the letters which I have classed as weak, and which are really weak when they occur in a nexus, should, as shown in the last chapter, be, when standing alone, more tenacious of existence, and less liable to elision than the strong letters. The cause of this apparent anomaly has been suggested as lying in their comparative softness, which renders them less liable to be omitted from euphonic causes, as they do not stop the liquid flow of Prakrit words by any harsh or decided check, like the strong letters; and this very softness renders them more liable to be passed over or treated as merely strengthening the strong letter with which they are combined, just as has been pointed out in the case of modern Bengali pronunciation in Chap. I., § 26.

This nexus must be treated in detachments, because each of the subdivisions which it contains, though following in its principal features the general law laid down above, yet exhibits certain special peculiarities of its own, arising in the main from organic properties, such as the aspiration which lies hid in the sibilants, and the cerebral nature of the semivowel τ . Such also are the volatile nature of the dentals and the extreme tenacity of palatals and nasals.

It is interesting also to notice that all these letters when in a nexus exhibit the same organic tendencies as when alone; the peculiarities which I have mentioned above will strike the reader as being the same as those which he has just noticed in Chapter III. Thus, again, we get harmony out of apparent confusion, and grasp laws out of the midst of a seeming chaos.

§ 78. NASALS IN A MIXED NEXUS.—(a) When the nasal is the first member of a nexus it is generally elided, but the second

letter is not doubled, as in a strong nexus. Instead, anuswāra is inserted in the place of the lost nasal. It might at first appear that this substitution of anuswāra for the organic nasal was a mere *compendium scripturæ*—a simpler form of writing introduced to avoid the necessity of using the clumsy and intricate Sanskrit letters, such as क्क, ज्ञ, ण्ण, न्द, etc., and it might further be urged in support of this view that as several of the languages have abandoned the characters क्क, ज्ञ, ण्ण, the only course open to them was to use the nasal dot. But this supposition is rendered untenable by several considerations. In the first place, as will be seen from the examples, the substitution of anuswāra for the nasals of the several organs is almost always accompanied by lengthening of the preceding vowel, which is indicative of compensation for some loss. In B. and O., where the Sanskrit method of writing with the compound consonant is still retained, there are often found two forms side by side,—the learned or Tatsama form with the compound character, preceded by a short vowel, and the vulgar or Tadbhava form with the single strong consonant, preceded by anuswāra and a long vowel. Secondly, this anuswāra is in most languages pronounced as a distinct anunāsika or nose-intonation, as in the French *bon, son*; this is peculiarly the case in B. and O., where both forms are in existence side by side. And, thirdly, in many cases the insertion of the anuswāra is purely optional, which would not be the case were it another way of writing the nasal; nay, in some instances it is entirely omitted.

Examples:

क.

Skr. कङ्कण "bracelet," Pr.-कंकणं, H. कंकन, P., G., M. कंगण, S. कंगण, B. कांकन, O. *id.*

Skr. जङ्गा "leg," Pr. *id.*, H. जांघ, P., S. जंघ, G., M. जंघा, B. जांगी, O. Tatsama.

ज.

Skr. गज्जाविका "hemp-plant," H. गांजा, and so in all.

Skr. चञ्चु "beak," H. चौंच, G. चांच.

ण.

Skr. कण्टक "thorn," Pr. कंटओ, H. कांटा, M., G., *id.*, P. कंढा, S. कंड़ि, O. कांटा, B. *id.*

Skr. शुण्ठि "ginger," H. सोंठ, P. सुंढ, S. सुंढि, B., O. शुंठ, G. सुंठ, M. शुंठि.

न.

Skr. चन्द्र "moon," Pr. चंद, H. चांद, and so in all, but P. चंद, S. चंडु.

Skr. स्कन्ध "shoulder," Pr. खंधी, H. कांधा, P. कंधा, O., B. कांध.

म.

Skr. कम्पन "trembling," Pr. कंपणं, H. कांपना, P. कंबणा, S. कंबणु, G. कांपवुं, M. कांपणें, B., O. कांपन.

Skr. जम्बु "rose-apple," Pr. जंबू, H. जामुन, P. *id.*, G. जांबु, M. जांब, S. जमु, B. जाम.

In Marathi may be found very many exemplifications of the same process; thus, in words compounded with सम्: सांकड, सांगड, सांच, सांड, सांध, सांपडणें, सांप्रदाय, सांबर, for Skr. सङ्कट, सङ्घट्ट, सङ्घय, षण्ड, सन्धि, सम्पादन, सम्प्रदाय, and शम्बर; in all of which the change from the organic nasal to the anuswâra is accompanied by a compensatory long vowel. It cannot be said that we have here an instance of the Prakrit tendency to preserve the original quantity of the Sanskrit syllable. It is true that in Prakrit the syllable might have its vowel lengthened, and probably would have, if to the ears of those who spoke Prakrit it should appear that the removal of one of two consonants following a vowel was likely to render the syllable a short one, seeing that having a short vowel it had previously been long only by position. But this is not the case here, as is evident from the fact that Prakrit does not lengthen the vowel,

but keeps it short, as in चंद, कंपण; and, moreover, the modern languages are not sensitive about keeping the exact quantity of Sanskrit words, as has been shown in Chap. II., § 40.

It is not easy to trace the history of this process; the early Hindi writers belonged to the western portion of the Hindi area, and Chand especially, being a native of Lahore, is peculiarly western in his pronunciation. In these old writers, therefore, there is a strong tendency to approximate to the Panjabi habit of retaining the short vowel. As there are no extant specimens of the speech of the eastern portion of Hindustan, or of Bengal, at that period, we can only guess from the general analogy of the languages that they, at least, used the long vowel.

In the case of जम्बु it is not, as at first sight might appear, the ब which has dropped out in जामुन, जाम, and जमु, but the व, after absorbing the म, has itself been softened into म; this is shown by the transitional forms जांबु and जांव. This is just the reverse of the process explained in Chap. III., § 65, where म is resolved into व; here व, preceded by anuswâra, has passed into म. It is only one more instance of how cognate processes work backwards and forwards in these languages.

The word कुम्भकार "a potter," is peculiar. It is in Pr. कुम्भारो, H. कुम्हार, P. *id.*, O. कुम्हार and कुह्यार, B. कुमार, and in vulgar Bengali they say कुमोर. Prakrit follows the general rule, and in this it is followed by the western languages M., G., and S., which all have कुम्भार. H. goes a step further, and rejecting the organic portion of the भ, according to rule (§ 68), retains only ह; the anuswâra is then written as म. This is a solitary instance, and may be explained by the existence of the Tatsama कुम्भ "a pot"; there would naturally be a desire to assimilate the two words, which would lead to the retention of the म, because if written as anuswâra it would sound *kunghâr*, and not *kumhâr*, by which all resemblance would be lost.

In कहार, the name of a caste in Bihar whose profession is to carry palanqueens, and whose name is derived from स्कंधधार, the double घ, together with the anuswâra, has disappeared, leaving only the ह, without any nasal at all. It is natural that such words as these, being in daily and hourly use in the mouths of the people of the lowest classes, should undergo abrasions and contractions of the extremest and most abnormal character.

A striking exception to the general rule is afforded by a small class of words in Sindhi derived from Sanskrit words having एङ् :

Skr. रण्डा "widow," S. रन.

Skr. लण्ड "penis," S. लनु, P. लन.

Skr. षण्ड "bull," S. सानु.

Skr. खण्ड "piece," S. खनु, Old H. खणा (written षणा), B. खानि.

Skr. पिण्ड "cake," S. पिनु.

On the analogy of these words, S. खनो "a sword," would be derivable from Skr. खण्ड, and not from खड्ग (see § 74). In all these words the cerebral letter has disappeared, and the nasal has been dentalized. There are, as noted, a few parallel instances in other languages, though these words follow in the main the general rule, *e.g.*—

Skr. रण्डा, H. रांड, pronounced *Ranr*, vulgarly spelt *Raur*, and by our countrymen sounded sometimes so as to rhyme with "roar," "soar"; at others so as to rhyme with "hour," "sour" (!).

Skr. षण्ड, H. सांड (*Sānr*).

Panjabi has a little group of words somewhat analogous to the Sindhi list, in which it treats न्घ by dropping the organic portion of the घ and doubling the न; thus, from

Skr. अन्धकार, H. अंधेरा and अंधीयारा, P. has अन्हेरा *annherd*.

Skr. संधि "a hole," H. सेंध, P. सन्ह.

Skr. **श्लोधा** "shoulder," H. कांधा, P. कन्ध.

Skr. **बन्धन** "binding," H. बांधना, P. बन्धणा.

Putting together this list, the Sindhi list in एड, and such Hindi words as कुम्हार, जामुन, etc., there results a tolerably strong body of words which do not follow the rule which has been taken as the general one. These words are too numerous to be traced as mere exceptions, and their existence must be accounted for by the peculiar tenacity of the nasal, which, as we have frequently seen before, is a great favourite with the people, and is more often inserted where it has no business than elided where it ought to be so according to rule.

(β) When the nasal is the last member of a nexus, it is regularly assimilated to the preceding letter, and in the moderns (except P. and S.) one of the two letters is elided with or without, but more often with, the compensatory vowel lengthening.

Examples:

Skr. **अग्नि** "fire," Pr. अग्नि, H. आग, M., G. *id.*, P. अग्ग, S. अग्नि.—
B. आगुन, and O. anomalously णिअ.

Skr. **लग्न** "attached," Pr. लग्नो, H. लगा, लाग, and लग, P. लग, M. लाग, and so in the rest.

Skr. **नग्न** "naked," Pr. एग्नो, H. नंगा, P. *id.*, S. नंगो, G. नागुं, M. नंगा, नग्गा, B. नेटा (*nengtā*), O. नंगला (diminutive).

Skr. **तीक्ष्ण** "pungent,"¹ Pr. तिण्ह, H. तीखा, and so in all, but P., S., and G. have the short vowel.

It is not correct to suppose in the case of नंगा, as Trumpp does, that there has been an inversion of the nexus from *gn* to *ng*. The *gn* first becomes *gg*, and remains so still in one Marathi form, and in G., and the anuswāra is subsequently inserted for the sake of euphony more than anything else. As there existed a long period in which the word was regularly

¹ For our present purpose च must be regarded as equivalent to ख.

spoken *naggo*, it is impossible that there should have remained in the public mind any consciousness of the lost nasal, and consequently, not knowing of its existence, they could not insert it.

Reference may here be made to the remarks in Chap. I. § 30, with regard to the immense interval of time which separates Sanskrit as a spoken language from the modern vernaculars, and it should be remembered that the lower classes of India are not philologists; they are not constantly haunted by the presence of Sanskrit; the great panorama of change and development is not spread out before their eyes as it is before ours, and they are in consequence not led by the clearness of the connexion between the various links of the great chain into forgetting the lapse of ages through which it rolls out its immense length. The word नग, when resuscitated as a Tatsama in modern times, has not changed at all, and stands side by side with the ancient नंगा, नग्गा, and नागुं, without interfering with them. Bengali in this word exhibits an archaic diminutive, which I have written in Devanagari characters नेटा, but this does not give the full force of the B. character न, which is a very strong nasal *ng*. In its own letters the word is written नेटो, and perhaps a more accurate transliteration into Nagari would be नेङ्गटा, although this even is hardly quite satisfactory.

The compensatory lengthening of the vowel has not been made in H., because Skr. *nagná* is oxytone, and to preserve the accent the last syllable is lengthened, giving *nangá*; where the long vowel following, according to regular practice, forbids the lengthening of the preceding syllable. In लग, which is used as a postposition in the sense of "near," "up to," the excessive frequency of its use has probably resulted in its assuming a shortened form, though here also *lagná* is oxytone, so that the first vowel should be short. P. has the verb लंगया "to approach," "to pass by," but no argument can be founded on this, as P. seldom lengthens a vowel as compensation.

§ 79. The compound letter **ज्ञ** = **ज** + **ञ** demands separate notice. It most frequently occurs in the verb **ज्ञा** "to know," and its numerous derivatives and compounds. Vararuchi has two rules on this subject. In iii. 5, he prescribes the regular course of assimilating the **ञ**, as in *sarvajjo*, *ingiajjo*, for *sarvajna*, *ingitajna*.¹ The commentator adds that this process is followed in all compounds of *jñā*, "to know"; but in this he is certainly wrong, as the next illustration shows. In iii. 44, the elision of the *j* is enjoined in all words having *jñ*, and one at least of the instances is taken from the root *jñā*,—they are **जणो**, **विखाणं** for *yajna*, *vijnāna*. Further on (iii. 55) he adduces **सखा** for *sanjñā*, and directs that the *n* shall not be doubled when preceded by the preposition *ā*, as in **आणा**, **आणत्ती** for *ājñā*, *ājñapti*. From his xii. 7, it may be inferred that in the Sauraseni Prakrit, *jñ* was inverted to **ज्ञ** *nj*, and examples are given **विज्ञो**, **जज्ञो** for **विज्ञ**, **यज्ञ**, while in the next sūtra (xii. 8) the above-quoted words *sarvajna*, *ingitajna*, preserve the *n* and reject the *j*, becoming **सव्वणो**, **इंगिअणो**, instead of, as in Maharashtri, *sarvajjo*, etc. Lastly, in viii. 23, we are told that this very root **ज्ञा** becomes **जाण**, as in **जाणइ** for **जानाति** "he knows"; this is nothing more than the usual substitution of **ण** for **न**, as in the special tenses in Sanskrit the form **जा** is substituted for **ज्ञा**, and the **न** is merely the conjugational sign of verbs of the *kṛi* class.

In the Saptasāhita the root **ज्ञा** is regularly **जाण**, and perhaps in one or two instances **आण**, though this is doubtful. **ज्ञातं** becomes **साअं**, and **विज्ञात** = **विखाओ**. **आज्ञा** = **आणा**. **यज्ञ** = **जणो**. The same treatment is observable in the Bhagavati.

There are thus four separate processes in the Prakrits:—

(1.) The regular and common one of rejecting the **ञ** and doubling the **ज**.

(2.) Rejection of **ज**, change of **ञ** to **ण**, and doubling it.

¹ I deem it unnecessary to put dots or dashes about this *n*, as it must be evident that the palatal *n* is meant; and dots or dashes are a nuisance alike to printer and reader.

(3.) Single ण after आ.

(4.) Inversion, peculiar to Sauraseni, into ज्ञ.

The change in the special tenses of ज्ञा into जाण comes under 1, as it is a rejection of ज, and the doubling of ज is precluded on account of its initial position.

In the modern languages considerable diversity of practice occurs. In all but G., S., and M., this letter is regularly pronounced *gy*, so that आज्ञा is sounded *âgyâ*, ज्ञान *gyân*. B. and O. retain the spelling ज्ञ, but H. and P. write as they pronounce. M. pronounces *dny*, G. as *jn* or *dn*.

Examples:—

Skr. आज्ञा "command," H. आग्या, P. आगिआ, S. अग्या.

Skr. यज्ञ "sacrifice," H. जाग, Old H. जज, M., O., B. जाग, P. जग, S. जगु.

Skr. यज्ञोपवीत "sacred thread," H. जनेउ, P. *id.*, S. जणो, G. जनोइ, M. जानवें. Not used in B. and O.

Skr. राज्ञी "queen," Old H. रागिनी, H. रानी. In the rest राणी.

Skr. ज्ञान "knowing." (a) As a verb, "to know," H. जानना, P. जाणना, S., G., M., O. जाण°, B. जान°. (β) As a noun, "knowledge," H. ग्यान, P. *id.*, B., O. *id.*, M., G. जाण, S. जाणु.

It would appear that the pronunciation *gy* is more frequent in Modern Tadbhavas, like *âgyâ*, and that in earlier times either the Maharashtri rule of rejecting the *n* was followed, as in Old H. जज, and in जाण° जान°, or the Sauraseni practice of rejecting the *j* as in जनेउ. So entirely, however, have the Prakrits abandoned their old geographical limits, if they ever had any, that we find Sauraseni characteristics in Marathi, and *vice versa*. As to the time when, and the reason why, the pronunciation *gy* arose, there is nothing certain to be said. It would seem, however, from a passage in the Ain Akbari that the pronunciation *jn* had not quite died out in those days, for the writer, in mentioning the town of Jâjpur, in Orissa (यज्ञपुर

=“city of sacrifice”) writes it *جشپور jashpur*, which, he adds, “they also call *جشنپور jashnapur*.” This note seems to indicate that the town had begun to be called Jajpur (for I suppose he means to indicate the soft *j*, almost like a *z*, of Eastern India, by his *ش*), but that the older and more correct pronunciation, Jajnapur, was still retained by some. It is curious that the town should have retained the form *jaj-*, while throughout Orissa the letter *ञ* is regularly and universally pronounced *gy*. The transition to this sound must have been in force much earlier in Western India, for Chand writes *रगिनी* for *राज्ञी* two centuries and a half before Akbar. The pronunciation probably arose, as Chand’s word would indicate, from splitting the nexus, from the fact of the nasal being the palatal *ञ*, which seems always to have had the sound *ny* or Spanish *ñ*; then followed the regular rejection of *n* and hardening of the remaining *य्य* into *य*. The whole process, however, is one entirely without a parallel in any of the languages.

§ 80. SIBILANTS IN A MIXED NEXUS.—It has been seen in Chap. III., § 66, that the sibilants when standing alone in a word are affected in two ways; on the one hand they are weakened into the aspirate, while on the other they are thickened into palatals. They exhibit precisely the same tendencies when forming part of a nexus; when they precede the other letter the transition to the aspirate is most frequently met with; when they follow it, that into the palatal.

The first process, in which the sibilant goes into an aspirate, is not always in the moderns accompanied by the usual compensatory lengthening of the vowel, inasmuch as the sibilant has not entirely disappeared, so that there is not that total loss of a letter which would demand compensation. Previous to disappearing, however, the letter which is in combination with the sibilant assimilates, in Prakrit, followed by P. and S., the sibilant to itself, attaching the aspiration to the last member;

thus, **ख** and **क्** result in **क्ख** *kkh*, **ख** in **क्ख**, **ख** and **प्** in **प्फ**. In the moderns, except P. and S., the double letter is resolved into a single, leaving **ख**, **क्**, and **फ**, respectively, but often without compensatory vowel-lengthening. The dentals and cerebrals will be discussed separately.

Weber, in his Prakrit studies, and especially in Bhagavati, p. 386, contends for the existence of a combination *kkh*, derived from *ksh* and *sk*. But in spite of the arguments adduced by the learned writer, there is no reason to believe in this method of pronunciation. It has been noticed before that **ख** is an awkwardly shaped letter, as it closely resembles **रव** (*rava*) on the one hand, and by the addition of a slight horizontal stroke **ख** *sva* on the other. It is perhaps nothing more than a curious coincidence that in Zend **kh** regularly corresponds to Skr. **ख**; but, apart from this, it is probable that the character, which is stated to be common in all the Jain MSS., **ख**, and which so closely resembles **रक** (*raka*) as to have been frequently so read, is nothing more than a simpler method of writing **क्ख**. It will be observed that **क्** differs from **व** only by having a little handle **ॠ** on the right side; consequently having already the loop of the *k* in **ख**, nothing was easier than to attach a handle to it, and thus make a fair representation of *kkh*. That Vararuchi, xi. 8, should be read *kshasya kkhakḥ* is hardly possible, since this would militate against the analogy of other cases where a sibilant forms the first member of a nexus, and would besides be directly opposed to the custom of the modern languages. If we read *kshasya kkhakḥ*, we should have the regular process about to be explained, though the ordinary reading *skakḥ* is preferable to either, because pointing to an important elucidation of the modern treatment of **क्**, as will be shown in the next section. Hemachandra's rule of substituting the jihvāmūliya with **क्**, giving perhaps **क्**, seems to be founded on the analogy of forms like **दुःख**, which, however, are quite foreign to the genius of Prakrit or the moderns. If the sound *kh*

were pronounced in ancient times as it is now, it would seem to be quite out of the question that there should ever have been such a group as *khk*, a combination of sounds which no Indian could ever pronounce. The only foundation for reading this group as *khk* seems to be the position of the क at the right side, or that side which is read last; but this is no sufficient reason, as inversions of writing are common in the Indian characters. Thus, in Skr. we read कि as *ki*, not *ik*, and in B. and O., as well as in some of the Dravidian alphabets of Sanskrit origin, *e* and *o*, *ai* and *au*, are written before and on both sides of the consonant which they follow; thus, in B. के, ऐ, ओ, ङे, are *ke*, *kai*, *ko*, *kau*, respectively, and even in some Skr. MSS. we find this practice, क्का standing for *ko*, and the like. In Western Indian MSS. we frequently find *mh* written ह्म and *hm* as म्ह, and in Old Hindi MSS., as for instance in Chand, *bbh* is regularly written भू or even भ्व. Especially in manuscripts written with a thick pen, as so many of them are, we find the scribe very hard put to it to get all the elements of a nexus into some sort of manageable combination, and he frequently therefore makes up his group more according to fancy or convenience than with regard to the legitimate sequence of the letters. This seems to have been the case with the group now under discussion, and it is therefore unnecessary to consider it as any exception to the general rule; Weber's transliteration *khk* being read wherever it occurs as *khk*.

Examples of the general rule:—

स + क.

Skr. स्कन्ध "shoulder," Pr. खंधो, G. खांद, खांध, M. खांदा.

ष + क.

Skr. पुष्कर "pond," Pr. पोक्खर, H. पोखर, पोखरण, M. *id.*, O. पोखुरि, B. पुखुर.

Skr. शुष्क "dry," Pr. सोक्खं, सुक्खं, and सुक्क, H. सूखा, P. सुक्का, M. सुका, सुखा, G. सुक्खं, S. सुक्को, B. शुका, O. सुक्किला.

Skr. मुष्क "lump," Pr. मुक्खं, M. मोख.

श + च.

Skr. पश्चिम "west," Pr. पच्छिम, H. पक्खिम, G. पक्कम, O. पक्कम.

Skr. वृश्चिक "scorpion," Pr. विञ्छुञ्चो (for विञ्छ°), H. बिक्कुञ्चा, P. विक्कू, S. विक्खू, G. विक्कु, M. विंचु, B., O. बिंछा.

स + प.

Skr. स्पर्शन "touching," Pr. फंसो, फास, H. फंसना, P. *id.*, S. फसणु, G. फसवुं, M. फसणें.

Skr. स्पन्दन "throbbing," Pr. फंदणं, H. फांदना, P. फंदना, M. फांदणें, and so in all.

ष + प.

Skr. पुष्प "flower," Pr. पुप्फं, Old H. पुङ्गप, H. फुप for पुफ.

Skr. वाष्प "vapour," Pr. वप्फो, H. बाफ, M. वाफ, G. *id.*, S. बाफ; the form भा° is also in use (see § 49).

In some cases the aspirate, instead of being combined with the strong member of the nexus, is written before it, as in पुङ्गप. Chand has *metri gratiā* पुङ्गकर for पोखर. So also Skr. निश्चय is H. निहचै, P. निहिचो, S. निहिचे, Marwari नैचै, according to its common practice of softening *h* into the palatal or labial semivowel respectively after vowels of those organs.

Sibilants preceding aspirated consonants, being unable further to aspirate them, disappear entirely, leaving no sign.

Skr. स्फोटक "boil," Pr. खोढञ्चो (!), H. फोडा, S. फुड्डी, but in the rest फोडा.

Thus also the immense collection of derivatives from the root स्फुट "to burst," exhibits universally an initial फ. It may be interesting to insert here a few of the derivatives of this root in one or two languages, to show how widely such roots are applied, and what intricate ramifications they have, and thus

to adduce proof of the excessive copiousness and flexibility of the modern Indian vernaculars, which have unfairly been pronounced by those who do not know them meagre and jejune, and unfit for literary cultivation.

Skr. स्फुट्, also स्फट्, "to burst," H. फुटना "to burst" (intrans.), फूटना "to break open," फोडना "to split asunder," फाडना "to tear," "break," फटना "to be torn," फाट "division of shares," फाटक "a gate," फाड खाना "to tear," "rend" (as a wild beast), फाल "a ploughshare," फुट "odd" (as opposed to "even"), "unmatched," फुटकर "arrogant," "overbearing," फट पडना "to burst with fat," "to be overgrown," "over-worked," etc., फटकना "to winnow," फुटकी "a stain," फड "a public-house," "gambling-house," "open house," फडफडाना "to flutter," "flap the wings," फडकना "to twitch convulsively" (as the muscles in disease), "to throb," फडकी "a partition," फुडिया "a pimple."

M. फट, फटकेणें, फटकळ "free-spoken," "abusive," फटका, फटकारा, फटकुरी, फट्या; फड "a mart," "any open or public room or place," फडणें, फडफडणें, फडा "the hood of a serpent," फडा "a huckster"; फाट, फाटणें, फाटफूट, फांटा "arm," "branch," "subdivision of a subject," फाड, फाडणें "to tear," "rend," फोंड "a lot," "quantity," फिटणें "to get loose," "to come undone," फीट "payment of debts," or rather "the state of having been paid"; फुटणें "to burst," फुटक, फुटकळ, फुटका; फुटाणा, फुटीर "worn out," "broken."

An equally large, or perhaps even larger, list might be made of derivatives from the root स्फर्, स्फुर "to tremble," "oscillate"; these derivatives in general have the sense of turning, returning, as, for instance, the common adverb फिर "again," and the like. The derivatives of स्था, or some of them, have been given in § 59, ex. 15, and more will have to be said about it hereafter.

Sibilants are rarely found at the end of a nexus, except in conjunction with क, त, and प. From their nature, being surds,

they can only combine with tenuous; and in this situation they migrate into the aspirated tenuous **क्ख**, assimilating to themselves in this their altered form the previous letter, thus making **क्क्ख**.

Examples :—

प + स.

Skr. जुगुप्सा “censure,” Pr. जुगुक्खा. Not now in use.

Skr. अप्सरस् “nymph,” Pr. अक्करा, Old H. अपहर, अहरी, S. अप्हरा.

The existence of the form **अपहर** shows that the sibilant first migrates of its own accord into **क्ख**, and thus a strong nexus arises, in which the first letter, though it remains untouched in S., in other languages is treated just as the first letter in a strong nexus always is, by being subjected to assimilation.

§ 81. The compound letter **च्च** is composed of **क्** and **ष**, and requires special notice, as from its very frequent occurrence it has, like **च्च**, come to be considered in some of the modern vernaculars a distinct simple letter.

This nexus has two treatments. In the first it, like **प्ष**, **त्स**, and other similar combinations, becomes in Prakrit **क्ख**, and in the moderns **क्ख**, preceded by the usual long vowel. In the second it becomes in Prakrit **क्ख**, and in the modern vernaculars **क्ख**, also preceded by a long vowel. As, however, the modern languages by no means follow the example of the Prakrit, but in many cases exhibit **क्ख**, where Prakrit has **क्ख** (though instances are not found where Prakrit has **क्ख**, and the moderns **क्ख**), it will be advisable first to give a table of examples to be analyzed and sorted subsequently.

Examples :—

Skr. अक्षि “eye,” Pr. अक्खी, H. आंख, P. अक्ख, S. अखि, G. आंख, B., O. आंखि, Kashmiri अक्ख.

Skr. क्षीर “milk,” Pr. क्षीरं, H. खीर, and so in all.

Skr. इक्षु "sugar-cane," Pr. उक्षू, H. ईख, छख, B. आकु, O. आखु, M. ऊस (see Chap. III. § 58).

Skr. चार "potash," Pr. छार, H. खार, and so in all.

Skr. मक्षिका "fly," Pr. मक्षिआ, H. माखी, P. मक्खी, S. मखि, G. माख, M. मखि and माशी, B. माखी, Kashmiri मक्ख.

Skr. क्षेत्र "field," Pr. क्षेत्र, H. खेत, खेडा, P., B., O. खेत, G. खेड, S. खिट्ट, M. शेत.

Skr. कुक्षि "belly," Pr. कुच्छी, H. कोख, P. कुक्ख, G. कुख, S. कुडहि, M. कुस.

Skr. दक्षिण "south," Pr. दक्षिणो, H. दखिन, in Eastern H. also दखिन, P. दक्खण, S. ड़िखिणु, Kashmiri दक्ख.

Skr. पक्ष "fortnight," Pr. पक्खो, H. पख, P., G. *id.*, S. पखु; B., O. write पक्ष, but sound *pakhḥ*, Kashmiri पक्ख.

Skr. द्राक्षा "vine," H. दाख, P. *id.*, S. डाअ, Kashmiri दक्ख.

Skr. च्छ्व "a bear," Pr. रिच्छो, H. रीक्ख, G. *id.*, P. रिच्छ, S. रिक्ख, M. रीस.

Skr. क्षुर "knife," Pr. कुरं, H. कुरा, P., S. *id.*, O., B. कुरि, M. सुरी.

Skr. क्षमा "patience," Pr. क्खमा, H. किमा, P. खिमा, S. *id.*, G. खमा, M. खमणें.

Skr. चित्ति "earth," Pr. छित्ति, H. चित्ती, S. छित्ति.

The question now naturally presents itself for solution, which is the older and more regular of these two processes—that in which च becomes छ, or that in which it becomes ख?

In discussing this point, the first thing to be borne in mind is that, according to the analogy of similar cases where the sibilant forms part of a nexus, it turns into an aspirate when preceding, and into a palatal when following, the other letter. Consequently we should expect that in the nexus क + ष, the sibilant being the last of the two letters would first become छ, and then, as in this condition क + छ is a strong nexus, the क would assimilate to the छ, forming क्ख.

In the next place,—though Vararuchi (iii. 29) gives the transition into क्ख as the regular process, illustrating it by *yaksha=jakkho*, and treats that into च्च as an exception peculiar to *akshi* and some other words,—yet that worthy's views on questions of philology are frequently hazy, and occasionally even quite wrong. For one instance of a change to *kkh*, he produces twenty of the other process. In the other Prakrit works also, though both forms are in use, the transition to *kkh* and *kh* seems to be most frequent, as also in Pali.

As the form *kkh* would arise more naturally from a nexus, in which the sibilant preceded, we are led to the supposition that in the mouths of the people the harsh and difficult *ksh* was frequently inverted into *shk*, and that the form *kkh* arose from this inversion. In favour of this supposition there are many arguments.

First, Vararuchi places the transition of *ksh* into *kkh* in the same sūtra as *shk* and *sk*; *shkaskakshām kha* (iii. 29), which looks as if all three processes were to a certain extent homogeneous.

Secondly, he distinctly admits the inversion in Magadhi, in the already quoted sūtra xi. 8, *kshasya skah*, giving as examples *laskase*, *daske*, from *Rākshasa*, *daksha*. The change of ष into स in this case is only natural, as the former letter, though strictly speaking a cerebral, is euphonically used even in Sanskrit in all positions where a heavy or harsh sibilant is required, स being reserved for those situations where a light and clean utterance is appropriate, as after the simplest of the vowels *a*, and when it stands alone; when, however, it follows a heavy vowel, or another consonant, ष is employed. Thus, in the present instance, when removed from the back to the front of the nexus, and preceded by *a*, the sibilant takes the form of स; had it been preceded by some other vowel, the ष would have remained, as in शुष्क, पुष्प.

Thirdly, the natives of India are very fond of inversions, and

particularly of this one, inasmuch as *sk* and *shk* are much easier to pronounce than *ksh*; and though Vararuchi confines this practice to Magadhi, yet the various Prakrit dialects have so long left their ancient geographical limits, and spread themselves over the country, that it is not surprising to find a peculiarity, which in his time was confined to Bihar, now prevalent all over northern India.

Fourthly, the Kashmiri, of which I have secured a few instances, is a language which, from its early separation from its conquerors, and its long isolation, has preserved archaic forms with great precision; and it is noticeable that in Kashmiri the change is always into *chh*. Marathi also, which in many respects has retained ancient forms with greater fidelity than Hindi and those languages which arose from it, regularly exhibits *च* or *छ*, which, as I have explained in Chap. III. § 58, is a softening of *क*.

Fifthly, the form *ख* occurs much more frequently at the beginning of a word in Hindi and its allied group; and as this is precisely the position in which the form *ksh* would be most difficult to pronounce, it is just in this case that the inversion might be expected to be most frequent.

The accent also affords a means of judging of the comparative antiquity of the two forms; it is found that the majority of words in which the modern languages exhibit *ख* in opposition to a Pr. form in *क*, have not preserved the Sanskrit accent. Thus *kshtrá*, *ikshú*, *kshárá*, and *kukshí* are oxytones, and if they were early Tadbhavas would have retained the accentuated vowel, which they have not done in the majority of instances. The same is the case with *kshetrá*.

From a consideration of the above arguments, the conclusion seems inevitable—that the transition into *क* is the older and more regular process of the two,—that the change into *ख* rests on an inversion of the two members of the nexus,—and that although it is found in Prakrit times, it is even there the less

original and less universal process. The comparative frequency of its occurrence in Pali and the Jain texts rests on the change, which is admitted even from early times to have been characteristic of Magadhi, from क + ष into स + क; that is to say, the above-named popular habit of inversion.

§ 82. When combined with dentals or cerebrals, the sibilants present some features peculiar to this combination, which justify the placing of them in a separate section.

The only possible groups are those of which the dental and cerebral tenues form part—स्त, स्थ, ष्ट, ष्ठ, and त्स, which latter is not in any way peculiar.

(1.) स्त. In the first place, the sibilant being the first member of the nexus aspirates the other member, which then assimilates the sibilant to itself; the resulting form is therefore त्य. In the modern period the त is rejected, and the preceding vowel, where possible, lengthened. Thus:—

Skr. हस्त “hand,” Pr. हत्यो, H. हाथ, G. *id.*, P. हत्य, S. हथु, M., O., and B. हात, with their usual disregard of aspiration. O. also हाथ.

Skr. हस्ती “elephant,” Pr. हत्थी, H. हाथी, S., G. *id.*, P. हत्थी, B., O. हाती.

Skr. प्रस्तर “stone,” Pr. पत्थर, H. पत्थर, P., M., G. *id.*, S. पथर, O. पथर, B. पाथर.

Skr. पुस्तक “book,” H. पोथी, and so in all.

Skr. मस्तक “head,” Pr. मत्थो, H. माथा “forehead,” M., G., B. *id.*, S. मथो, P. मत्थ, O. मथा.

Skr. स्तम्भ “post,” Pr. खंभ, H. थंभ, थामना, थंभ, P., G. *id.*, S. थंभु. The Pr. form is, however, common in all.

Skr. स्तन “teat,” H. थन, P. थण, S. थणु, G. थान, M. थना, O., B. थन.

The word स्त्री “woman,” undergoes so many changes that it will be well to give them all in detail:

Skr. स्त्री “woman,” Pr. इत्थी. Sauraseni (Var. xii. 22), इत्थिका,

इत्थिआ; the इ being prefixed to assist the pronunciation. Old H. तिरिया, H. *id.* and चिया, तोया, तिवाई, and as a late Tadbhava इखरी; P. तोमत, तोमी, or तोवी, तिरया, टिलवा, तिलया, as also इसवी or इसतरी, S. इखिरी, G. चिया, O. तिरि, तिळा.

Most of these forms are of the very lowest type, being produced by diminutive and familiar additions to the split-up and distorted elements of the original word, and as such can hardly be taken into consideration in searching for traces of a rule for the general treatment of the nexus. The P. forms तोमी, etc., appear to have come from Skr. स्त्रीमती, an ignorantly applied feminine of स्त्रीमन् "a husband."

(2.) ख. The numerous derivatives of the root खा, falling into the two classes which begin respectively with थ and ठ, have been exhibited in some detail in Chap. III., § 59, example 15. It is unnecessary to repeat them here. ख has in other words also a tendency to migrate into the cerebral; thus:

Skr. खग "a rogue" (root खग् "to conceal"), H. ठग "a rogue," ठगना "to cheat," and so in all, with many subsidiary forms.

It is somewhat difficult to adduce instances of initial ख without getting among derivatives of the root खा; so widespread is this sound in the sense of "standing," that almost every word in the language which contains it may be referred more or less directly to that root.

In extreme instances, that is to say in words of very common use, the थ of ख has undergone a further change into ह. This occurs in a few words only, mostly adverbs, pronouns, and the like hardworked material.

Skr. तत्स्थाने "there," H. तहां, S. तिहां, G. ताहां. It is however retained in P. उत्थे, M. तेथें, B. तथाय, and cerebralized in O. सेठारे.

(3.) छ and ञ. These become, according to rule, झ, with the further change into ठ. Vararuchi (iii. 10) treats this as

a substitution, but he gives the process correctly, whatever he may think of its meaning. Thus, his examples *lat̥thi*, *dit̥thi*, for *yashti*, *drishti*, are correct, as will be seen below. It did not apparently strike him that the sibilant on going out leaves behind it an aspirate, and as an aspirate cannot be the first member of a nexus, it is attached to the last member, thus producing *ṭ*, and ultimately *ṭ* only.

Examples :

Skr. यष्टि "stick," Pr. लट्ठी, H. लाठ, लाठी, P. लट्ठी, M. लट्ठ, G. लाठ and लाट, S. लठि, O., B. लाठी, लडी, with rejection of the aspirate and softening of tenuis to media.

Skr. दृष्टि "sight," Pr. दिट्ठी, H. दीठ and डीठ, P. डिट्ठ, M. दीठ, S. perversely डिति.

Skr. मुष्टि "fist," Pr. मुट्ठी, H. मूठ, मुठा, B. मुठा, मुठि, M. मूठ, G. मुट्ठो, S. मुठि.

Skr. काष्ठ "wood," Pr. काट्ठो, H. काठ, and so in all.

Skr. अष्टन् "eight," Pr. अट्ठ, H. आठ, and so in all, except S. अठ; P. अट्ठ, Kashmiri आठ, Pushto अतह (if we may thus transliterate अत).

Skr. षष्टि "sixty," Pr. सट्ठी, H. साठ, M., G. *id.*, S. सठि, P. सट्ठ, O. साठिए, B. षाइट.

Skr. पृष्ठ "back," Pr. पुट्ठि, H. पीठ, B. *id.*, M. पाठ, G. पिठ, पुठ, P. पिट्ठ, पुट्ठ, S. पुठि, O. पिठि.

This is one of the processes which date from very early times, and of which traces may be found in classical Sanskrit. Thus, *कोष्ठ* "a granary," has also the allied dialectic form *कोट्ठ* "a fort," the idea of a safe or guarded place being common to both. From the former comes a set of words denoting, in the first place, "granary," and by a simple transition, "merchant's house," and as a diminutive, "a room." Thus, *कोठा* "granary," "mercantile firm," etc.; *कोठी* the same, also applied to the residences of English gentlemen, as they were originally mer-

chants, living in "factories." Indigo and other factories are still called *kothī*. कौठरी, diminutive, means "a chamber of a house." From the latter comes the modern कौट "a fort," and its P. diminutive कौटला.

In Chap. II. § 46, will be found another instance of this law in the case of बैठा "seated," from डपविष्ट. Similar in formation is the following :

Skr. प्रविश् "to enter" (p.p. प्रविष्ट). H. पैठना, S. पिहणु, p.p. पेठो, G. पेशवुं (= प्रवेशनं), p.p. पेठो, O. पसिबा which is analogous to its use of बसिबा, where H. has बैठना.

Of the words in the list above, यष्टि and षष्टि are oxytone; in the former the accent has preserved the final *i*, but in the latter some languages have rejected it. This causes great confusion, especially to Englishmen, who generally fail to catch the very slight difference in sound between सात = "seven," and साठ = "sixty." In these languages frequency of use has probably worn away the final *i*.

The nexus ष्ट undergoes a further change in modern languages, of which there appears to be little or no trace in the Prakrits, by which the ठ, resulting from the absorption of the sibilant, is softened into its corresponding media ढ; the same takes place with ष. Thus :

Skr. वेष्ट "an inclosure," H., P. वेढा "a hedge," M. वेढा, S. वडेहो, O. वेढा, and भेढा, B. वेढा.

Skr. कुष्ठ "leprosy," H. कोढ़ (*korh*), P. *id.* and कुङ्कड, S. कोडहो, G. कोहोड, कोड, and कोड, M. *id.*, O. कुढ, B. कुडि.

Skr. रुष्ट "angry," H. रूढ, P. *id.*, B. रूढ "harsh."

This rule also accounts for such forms as दाढी, from दंष्ट्रिका; see § 59, example 3. In this case the process has begun in Sanskrit, in which there is the form दाढिका.

One of the few Prakrit instances is the root वेष्ट, quoted above, which, though it frequently takes the form वेड्ड, yet does more

generally appear as वेड. ख also undergoes in one instance a similar transition :

Skr. अस्थि "bone," Pr. अट्टि, H. हड्डी, हाड, P. हड्डी, M., G., B. and O. हाड.

What has here taken place is, that the ट्ट of Prakrit has been softened to the corresponding media ड, the aspiration of which has been thrown back to the beginning of the word. Analogous is the throwing back of the aspirate in Skr. ओष्ठ, H. होंट "lip."

ख and छ were, even in Sanskrit, very closely allied, and in the careless style of the Lalita Vistara the two groups are used as equivalent to one another, as अनवस्ता for अनुवष्टा (L. V. 13).

(4.) त्स follows the rule of प्स and च, and becomes च्छ and छः

Skr. वत्स "calf," Pr. वच्छो, H. बक्का, बक्कू, and so in the others.

Skr. वत्सर "year," Pr. वच्छरो, not in modern use except as Tatsama.

Var. gives two exceptions to this rule, *ussuo* and *ussavo* for *utsuka* and *utsava*, neither of which are found in the modern languages. It is said that the name of the ancient town and fortress of Mahoba in Bundelkhand is derived from *Mahotsava*, i.e. the "great feast," in which case there must have been an intermediate form *mahossavo* or *mahossabo*, and it seems highly improbable that the double *s* should have been entirely elided. The place was popularly known as Mahoba in A.D. 1184, when it was captured by Prithvi Raj, the Chohan King of Delhi, and, as General Cunningham places the date of the great feast at A.D. 800, a period of less than four hundred years intervenes between the two forms. Now at the pace at which linguistic development proceeded in those centuries, the first beginning of the modern Tadbhava period, the total suppression of the double *s* certainly could not have occurred in so short a time. It is probable therefore that the name *Mahoba* has some other origin, and that the derivation from *Mahotsava* was invented to

support the legend of the divine origin of the Chandel race, whose capital it was.

§ 83. THE SEMIVOWELS IN A MIXED NEXUS.—Only र and ल can occur as the first member of the nexus. व and य clearly cannot precede a strong letter; and as their treatment is complicated by their close connexion with ब and ज respectively, they will be discussed in a separate section.

(1.) र preceding is first assimilated and subsequently elided. In Prakrit the rule is universal. Vararuchi iii. 3 gives the brief rule *sarvatra lavarām*, including *v*. His instances are: of *l*,—*ukkā*, *vikkalam*, *vikkaro*, for *ulkā*, *valkala*, *viklava*; of *v*,—*loddhao*, *pikkam*, for *lubdhaka*, *pakva*; of *r*,—*akko*, *sakko*, for *arka*, *śakra*. He takes no notice of other changes of these letters in a mixed nexus. In the second stage the vowel is lengthened or not, according to the position of the accent or the weight of the following syllables. In Prakrit the preceding long vowel of the Sanskrit is shortened before the double consonant which results from assimilation, the length of the vowel being, however, restored, and an anuswāra sometimes added over and above, in the modern languages, where by dropping one of the two consonants compensation comes into play. Examples:

Skr. अर्चि, “flame,” H. आंच, and so in all except S. and P.

Skr. कर्कट “crab,” Pr. कक्कडो, H. कैकडा, S. कांकिडो, O., B. कांकडा.

(The nasal reminds us of Lat. *cancer*.)

Skr. कर्कटिका “cucumber,” H. कक्कडी and ककडी, P. *id.*, S. ककिडी, G., M. काकडी, O. काकुडी, B. *id.*

Skr. कर्पट “rag,” Pr. कप्पट (?), H. कपडा “cloth,” sometimes कापडा, P. कप्पडा, S. कापडो, G., M. कापड, O., B. *id.*

Skr. कर्पास “cotton,” Pr. कप्पास, H. कपास, P., S. कपाह, M., G. कापूस, O. कपा, B. कापास.

Skr. कर्पूर “camphor,” H. कपूर, P., S., G. *id.*, M. कापूर, O., B. कपूर.

Skr. कर्बुर "mottled," H. काबर, कबरा, P. कत्रा, S. कुबिरो, G. काबर, M. कबरा.

Skr. खर्जूर "date-palm," Pr. खज्जूर, H. खजूर, and so in all.

Skr. गर्जन "roaring," Pr. गज्जणं, H. गाजना, P. गज्जणा, S. गजणु, G. गाजवुं, M. गाजणें.

Skr. गर्भ "womb," Pr. गब्भ, H. गाभ, G., M. *id.*, P. गब्भ, S. गभु,

Skr. गर्भिणी "pregnant," Pr. गब्भिणी, H. गाभिन, P. गब्भण, S. गभिणि, G., M. गाभण, B गाभिण.

Skr. दुर्बल "weak," Pr. दुब्बल, H. दुबला, P. दुब्बल, S. दुबिरो, डबलो, M., G. दुबळ, दुबळा, B. दुबला.

Skr. वक्त्र "goat," Pr. बक्करो, H. बकरा, B., G., O. *id.*, P. बक्करा, S. बकिरो, M. बोकर.

Skr. मार्ग "road," Pr. मग्गो, H. मांग,¹ P., G. *id.*, G. also माग "road," M. *id.*

Skr. मार्जन "asking," Pr. मग्गणं, H. मांगना, P. मंगण, S. मङ्गणु, B., O. मागन, M. मागणें, G. मागवुं.

Skr. मर्जन "rubbing," Pr. मज्जणं, H. मंजना, P. *id.*, S. माजणु, G. मांजवुं, M. माजणें, B. माजिते, O. माजिबा.

Skr. सर्प "serpent," Pr. सप्पो, H. सांप, O., B., M., G. साप, P. सप्प, S. सपु.

The anuswâra is employed in this class of words with great frequency, especially in Hindi; and in Sindhi it has been incorporated with the following consonant into the nasal letter of the organ in question, either ङ or ञ, but it may be assumed that this is due to the eccentricity arising from the as yet unsettled state of Sindhi orthography. It would, however, be incorrect to deduce the inference that र passed over into anuswâra. The latter did not come into use till many centuries after the existence of the former had been forgotten, and in some languages has never been introduced at all. It is a

¹ In the sense of "the parting down the middle of the hair" in women.

peculiarity of Hindi to indulge in these nasal sounds in season and out of season; but their general insertion in words of this class does not seem to date further back than the fifteenth century, at least eighteen hundred years since such words as *mārga* had been replaced in popular speech by *maggo*.

In the matter of lengthening the vowel of the affected syllable by way of compensation, the general system is pretty accurately followed, the vowel being lengthened where possible, that is, in open syllables or before light terminations, but not in words where a heavy formative syllable follows, or one containing a long vowel.

र when the last member of a nexus follows the general rule.

Skr. व्याघ्र "tiger," Pr. वग्घो, H. बाघ, and so in all.

Skr. भ्राता "brother," H. भाइ, and so in all, only in P. भाउ.

Skr. भ्रमर "bee," Pr. भमर, H. भंवर, भौर, P. भंउर, S. भौंर, M. भौर, O. भंअर, B. भामर.

Under this head comes the large group of words compounded with the prepositions प्र and प्रति. In many, nay perhaps most, of these the ordinary rule is followed with this modification, that when प्र is the beginning of the word, it cannot be double in Prakrit, and consequently there is no necessity for compensation in the modern languages. Instances of the ordinary rule are :—

Skr. प्रस्तर "stone," Pr. पत्थर, H. पत्थर. See § 82.

Skr. प्रस्थापन "sending," H. पठाना, B. पाठान, O. पठाइवा, M. पाटविण्णं, G. पाठवुं, S. पठणु.

The र of प्र is, however, not unfrequently separated from the प, and thrown forward to the next consonant, especially in Hindi and Panjabi. Thus the common names of men प्रकाश, प्रताप, प्रसन्न are pronounced पर्गाश, पर्ताब, पर्सन, Pargâsh, Partâb, Parsan, and the like. Other instances are—

Skr. प्रगण "a country," H. पर्गना or परगना, and so in all.

Skr. प्रणाली "a drain," H. पर्नाला, P., G. *id.*, M. परणाळी.

In the same manner प्रति seems at an early period to have become in common speech पति *parti*. We do not find any instances of it in this form, but it is only through such a form as this that the Prakrit पडि, which is the regular equivalent for Skr. प्रति, could have arisen. Prakrit examples are *paḍi-siddhi*, *paḍisaro*, *paḍivaddi*, *paḍivao*, for *pratispardhā*, *pratisara*, *pratipatti*, and *pratipad* respectively. In the modern languages the इ is generally, if not universally, dropped, and पड remains. This is also in H., P., B., and all but the three Western languages, often written पर through carelessness, as the sound of ड in the middle of a word is so closely similar to that of र. Thus :—

Skr. प्रतिवासी “neighbour,” Pr. पडिवासी, H. पडोसी (also पर°), and so in all.

Skr. प्रतिक्षाया “image,” reflection,” H. परकाई, परकांवा, परकां, “the shadow of a person or object.” M. पडकाया, G. पडकायो, B. पर्काया.

Skr. प्रतिश्चा “catarrh,” M. पडसं.

Skr. प्रतिक्रिया “mutual help,” M. पडकय.

Skr. प्रतिजिह्वा “uvula,” M. पडजीभ.

Skr. प्रत्युत्तर “rejoinder,” G. पडउत्तर.

In connexion with this tendency of र to detach itself from its consonant, and change its place in a word, either going forwards or backwards, may here be introduced the method common in Old Hindi of writing such words as सर्व, etc. Chand has अन्न, धम्म, सोन्न, वन्न, वन्नना for सर्व, धर्म, सुवर्ण, वर्ण, वर्णन always, and प्रवत, गंभव, क्रम्म, कन for पर्वत, गन्धर्व, कर्म, कर्ण occasionally, where his rhythm requires it. This method of pronunciation has not wholly died out in the rural parts of Hindustan Proper, and may still sometimes be heard in Bhojpuri, and probably in other dialects also. It is owing perhaps to this that H. makes from सर्व, the modern word सब, and not

साब for "all." Had the र remained attached to the व, its absorption would have induced a compensatory lengthening of the vowel; but as it had previously been transferred to the स, no compensation could take place, because it will have been noticed, though not specially mentioned, that it is the preceding vowel which is lengthened in compensation in order to preserve the original quantity of the syllable, and never the following one.

In some cases it is observed that when र, as the first member of a nexus, disappears under the influence of the usual processes, it leaves behind it a trace of its presence by aspirating, sometimes the preceding letter, sometimes that with which it was combined. This process is mainly confined to the three western languages, and more particularly to Sindhi. In the cases where the preceding letter is aspirated, the र before being absorbed has probably, as in the early Hindi words just quoted, transferred itself to that letter; and the whole transaction rests on the connexion between र and स; not so, however, that र has ever been deliberately changed into स in the combinations in question, but that it partakes with the sibilants of a sort of harsh utterance closely allied to the aspirates, an alliance which underlies the Sanskrit changes from visarga : into स and र, and the Latin forms *arbos*, *arbor*; *flos*, *floris*, and the like, as also the German *war*, English *was*, and many other old Indo-Germanic transitions. Instances of the process are—

Skr. शर्कर "sugar," M. साखर.

Skr. सर्व "all," S. सभु.

Skr. गर्त "ditch," S. खड़.

Skr. कर्षण "dragging," S. खसणु, खुसणु.

In S., even where the र is not elided, this process occasionally occurs, as in पर्भु and पिर्भु "a festival," Skr. पर्वण, H. पम्ब, मुखिरि "a bud," Skr. मुकुल, where the ल has first been changed into र, which then exercises its aspirating influence.

Skr. मार्गशीर्ष "November-December," S. मंघिह, P. मग्घर. In the other languages this month is called by names derived from the asterism अग्रहायण (but see § 91).

(2.) ल when preceding is elided, according to rule. It is of rare occurrence :

Skr. वल्गा "rein," H. बाग, and so in all.

When following it is also assimilated :

Skr. शुक्ल "light fortnight," H. सुक्, but oftener सुक्कल and सुदी.

In one or two instances this letter is thrown forwards in the same manner as र in the positions noticed above. Thus :

Skr. स्लीहा "spleen," H. पिल्हा and पील्हा, B. पीला, O. पिल्हाइ.

To this tendency may be ascribed the Skr. पुलिन "island," from स्रविन्, retained in M. and B. to signify one of those small islands or alluvial formations more usually called "chars," which so often appear in the large Indian rivers; the idea of "swimming" involved in स्रविन् has been, by a metaphor, transferred to these islands which, as the Roman poet says, "apparent *nantes* in gurgite vasto."

ल is, however, far more frequently allowed to remain and separated from the other member by that process of splitting which has already been mentioned, especially in Chap. II. § 45. There is a certain hardness about this letter which, when its frequent connexion with the nasal in Bengali or Oriya is also taken into account, preserves it from elision or assimilation. Trumpp's remark,¹ that a long vowel preceding or following renders assimilation impossible, does not appear to be borne out by facts, because even in Prakrit the long vowel is shortened, as in *maggo*, *rattī*, for *mārga*, *rātri*; and in the modern languages it is again lengthened as compensation for the loss of the first consonant.

¹ Article on Sindhi in *Journal D. M. G.*, vol. xv., p. 740.

§ 84. The semivowel य when attached to a strong consonant in the first place drops out without compensation; as—

Skr. योग्य “fit,” Pr. जोगो, H., P. जोग, S. जोगु, all the rest जोग.

Skr. च्यु “to fall,” H. चूना, P. चोणा, S. चुहणु, M. चावणें, B. चुआन,
O. चुइबा (M. and B. are causal forms).

In other cases it is resolved into *i*, and thus also finally disappears. Var. iii. 66 gives one instance: ज्या “a bowstring,” becomes जीआ, with long *i*. Chand has अनि for अन्य, which is, however, a weak nexus.

Skr. त्याग “abandoning,” H. तिआग, तिआगना, P. *id.*, M. टाकणें,
O. तिआगी.

This latter process is more frequent in the weak nexus, where it will be discussed fully.

व. Example of the usual elision is—

Skr. पक्क “ripe,” Pr. पिक्क, H. पक्का, P., M., O. *id.*, G. पाकुं, B. पाका,
S. पको.

Of softening into the corresponding vowel, parallel to the treatment of य just noticed, examples are:

Skr. त्वरितं “quickly,” Pr. तुरिअं, H. तुरंत, P. *id.*, S. तुर्तु, G. तुरत,
M. तुरुत.

Skr. द्वि “two,” Pr. दुए दो, H. दो, B., O. दुइ, M. दोन.

In two cases, however, it is treated as *b*, and consequently the nexus becomes a strong one, in which the first letter goes out:

Skr. ज्वलय, ज्वालय “to kindle,” H. बालना (for बलाना), P. बालणा,
S. बारणु.

Skr. ज्वर “fever,” S. बर.

The forms बलाना and बर are also, however, in common use in all the languages.

Though it may be at present beyond our power to trace in all cases the distinction between व and ब, yet the example of the western languages of the group shows that in that part of India at least a distinction did always exist, and the sweeping assertion of Prakrit scholars, that *b* and *v* are the same, cannot be accepted; and even if it were, it would not be correct to write both, as Cowell does, as *v*, but rather as *b*. Indeed *v* should almost be banished from Indian transliteration, and the two letters *w* and *b* should be used for the soft and hard sounds respectively. As the last member of a mixed nexus, the soft sound would in most instances be the correct one, and we should in such positions write व and pronounce *w*; thus, ज्वलयति is *jwalayati*, and not *jr*. क्व is *kwa* and not *kva*; at least, when listening to the pronunciation of natives, the former is a nearer approximation to the sound heard than the latter.

§ 85. We now come to that class of mixed nexus formed by the junction of a dental consonant and a semivowel, where the ordinary rule of the absorption of the weaker letter does not hold good, or rather a treatment occurs which is perfectly in accordance with the general system, though its real nature is apt to escape detection. This treatment varies in the three semivowels य, र, व. ल does not present any peculiar features in this combination; being itself a dental semivowel, it can effect no change of organ, nor are there, as far as I know, any instances even in Sanskrit of such a combination as त or द with ल following.

The process about to be noticed is organic or qualitative, whereas the previously explained changes have been rather positional or quantitative. It consists in this, that each of the three semivowels, though disappearing under the operation of the ordinary rule, has previously dragged over the dental into its own organ: य into the palatal; र into the cerebral; and व into the labial, though more rarely than the others.

(1.) य.—The change which occurs is absolutely regular as regards the grades of the organ; thus:

Smooth tenuis त + य = smooth palatal tenuis च.

Rough tenuis थ + य = rough palatal tenuis छ.

Smooth media द + य = smooth palatal media ज.

Rough media ध + य = rough palatal media झ.

Here it would at first sight seem as though the palatal semi-vowel य had held its own against the dental; but what has really happened is that the य has evidently from the earliest times been pronounced with a stronger palatal tone than in European languages (except Spanish), a larger portion of the tongue's surface being brought into contact with the fore-palate, resulting in a sound which approached nearer to a ज;¹ so that in a form द + य the spoken equivalent was nearly द + ज in sound; that is, a strong nexus, in which case the first letter would go out according to rule. In द + य (ज), both letters being in the same grade, the former leaves no trace of its influence, but in the other cases the dentals, though they disappear, leave behind them an influence, shown by the exact change of ज into the grade of the absorbed letter: त producing च; थ, छ; and ध, झ.

In Pali and Prakrit the above combinations are respectively च, छ, झ, and ज्ञ, which reveals the fact that the dental before absolutely expiring had assimilated itself to the palatal. So that the steps are as follows in historical order:

त + य = त + ज = च + च = च.²

थ + य = थ + ज = छ + च = च + छ = छ.

In the combination थ + ज it would be contrary to the spirit

¹ य is regularly pronounced as ज in B. and O., and Skr. words containing य are written with ज in H., P., M., etc.; as they are also in most Prakrits and in Pali.

² The rejection of the first letter of the nexus is sometimes compensated for by a long vowel, as in नाच = नञ्च; and sometimes not, as in सच = सञ्च.

of the language to allow the aspirate to stand first; consequently the necessary inversion has taken place.

Examples :

त + य.

Skr. सत्य "true," Pa., Pr. सच्च, H. सच, P. सच्च (and सत), M., G. साच, S. सचो, B., O. सचा.

Skr. नृत्य "dance," Pa., Pr. नच्च, H. नाच. and so in all.

Skr. नित्य "always," Pa. निच्चं, Pr. णिच्चं.

Skr. मृत्यु "death," Pa., Pr. मिच्चु, Old H. मीच.

Skr. कृत्य "done," Pa., Pr. किच्चं, Pa. also कच्चं.

थ + य.

Skr. मिथ्या "false," Pa., Pr. मिच्छा, Old H., B. मिछा, O. मिच्छ.

Skr. रथ्या "road," Pr. रच्छा.

Skr. पथ्य "proper," Pr. पच्छा.

द + य.

Skr. अद्य "to-day," Pa., Pr. अज्ज, H., M., G. आज, B. आजि, O. *id.*, P. अज्ज, S. अजु. In this word the *i* must be taken as a trace of the य, in which case the semivowel is doubly represented.

Skr. मद्य "wine," Pa., Pr. मज्जा.

Skr. विद्या "knowledge," Pa., Pr. विज्जा, S. विजा.

Skr. विद्युत् "lightning," Pa. विज्जुमा, Pr. विज्जुली, H., P., and B. बिजली. M. *id.* and बीज, G. विजुळी, O. बिजुली, S. विजु.

घ + य.

Skr. मध्य "middle," Pa., Pr. मज्झ, H. मझि, मंझोला, etc., S. मंझि, etc., P. मंझ, M. माझ, B. *id.*, O. मझि.

Skr. ध्यान "reflection," Pa., Pr. झान, H. in composition समझाना "to understand," and so in all.

Skr. बन्धा "barren woman," Pa., Pr. वंन्धा, B. बांझा, M. वांझ, G. वांझणी, S. वांझ, Marwari बांझडी.

Skr. उपाध्याय "teacher," Pa. उपज्झायो, Pr. उअज्झायो, H. ओझा.

Skr. सन्ध्या "evening," Pr. संझा (Var. iii. 56), H. सांझ, B. and M. *id.*, P. संझ, S. सांझी; but G. सांज and a M. form सांज are also in use.

Under this head must be noticed a class of causals in which, though a vowel intervenes in Sanskrit between the dental consonant and the palatal semivowel, the treatment is the same as though there had been no vowel.

Examples :

Skr. वादय "to sound," H. वाजना "to play," and so in all with slight modifications.

Skr. भेदय "to separate," H. भेजना "to send," P. *id.*

Skr. चोदय "to excite," Old H. चीज "ardour," M. चीज.

In these cases the vulgar pronunciation probably dropped the short vowel and produced वादन, etc.

There is also a considerable class of verbal roots ending in ध which reappear with the termination झ, and which must be referred to this head.

As examples may be taken—

Skr. बुध् "to understand," Pr. बुज्झ, H. बूझना, P. बुज्झणा, S. बुझणु, B. बुझन, O. बुझिवा, G. बुजवुं.

Skr. बंध् "to bind," S. बझणु, H. बझना "to be ensnared."

Skr. युध् "to fight," Pr. जुज्झ, P. जुझणा, Old H. जूझना, जुझार.

Skr. शुध् "to purify," Pr. सुज्झ, H. सूझा, सूझना, S. सुझणु, G. सुझ.

The difficulty in this, as in the last class, is that the existence of the ज and झ of necessity supposes forms द + य and ध + य; but the received theory is that the infinitive in Hindi, Panjabi, Sindhi, and Marathi is derived from the Skr. verbal noun in *ana*. Now although in the present tense of the Skr. verb we have the required forms with य, as *vādayati*, *budhyate*, yet this conjugational characteristic does not appear in the verbal noun, which would be *vādanam*, *bodhanam*. It must, I apprehend, be

admitted that in the speech of the vulgar there existed forms *vadyanam* and *budhyanam*; in many instances the Hindi entirely ignores the existence of a guṇa vowel in the verbal nouns, and forms its infinitive with the same quality of vowel as exists in the base or in the present tense.

Another way of explaining the matter is that adopted by Lassen (p. 249), namely, that the present tense came first into use, thus, **एच्चदि**, from **नृत्यति**; and that the verbal noun was formed on this model **एच्चणं**, though the Sanskrit verbal noun is **नर्तनं** and contains no **य**. This view, however, assumes that the Prakrit was regularly formed by derivation from the Sanskrit, whereas modern researches have led us to believe, on the contrary, that the Prakrits are of equal antiquity with Sanskrit, in many cases at least; and in the light of this opinion it would seem more natural to suppose that even in times when Sanskrit was spoken the vulgar ignored the distinction between conjugational and other tenses and said **नर्तनं**, just as they said **नर्त्यति**.

In the causal in H. we have **बुझाना**, which corresponds to a Skr. form **बोधयन्**; here the accent lies on the short vowel intervening between the **घ** and the **य**, and we cannot, therefore, suppose the **झ** to have arisen from a junction of these two letters; moreover the **य** of the Skr. causal is represented by **उ** in the Old H. and Mod. H. dialectic forms **बुझाउना**, **फिराउना**, and the like; or by **ल** in the forms **बैठालना**, **सोलाणा**, **खिलाणा** (for **सोआलना**, **खिआलना**); or by **इ** in the O. **दिखाइवा**, **चलाइवा**. We must therefore suppose that the simple verb having received the form in **झ**, as **बुझना**, the causal was formed from it by lengthening the penultimate vowel, without regard to the causal form of the Sanskrit (see Chap. III. § 60).

(2.) **व**. This semivowel follows the same rule as **य**, though the instances which I can adduce are not so numerous or so clear as in that letter. Just as **य** is hardened into **ज**, so is **व** into **ब**; so that when preceded by a dental it forms a strong nexus, the

natural result of which is that the dental goes out, but leaves behind a trace, inasmuch as it changes the व into its own grade. The principal instance is—

Skr. आत्मन् “self,” Pr. अप्पा, H. आप, आपन, आपस, P. *id.*, B., O. आप, etc., G., M. *id.*, S. पाण.

Here the म has first become व, as in गांव = ग्राम, नांव = नाम. This व in pronunciation becomes ब, which by the influence of the preceding त is hardened into प; and the strong nexus thus obtained, त्प,—which actually occurs in the form आत्मनो on the Girnar rock inscription,—regularly changes to प्प, and subsequently to प, with a long vowel preceding. See Vararuchi, iii. 49, where रुक्म, रुक्मिणी, become रूप, रुपिणी, having been first रुक्प, etc.

To this law is to be referred the Skr. termination त्वं, त्वन्; which becomes त्पन्, and then प्पन्, lastly पन् and पा; thus:

Skr. वृद्धत्वं “old age,” H. बुढापन्, P. बुढापा, S. बुढापण, etc., G. बुढापो, B. बुढापणा and पा.

In Sindhi this termination is very common and takes in addition to the full forms पण, पणी, those also of पो, पी, प, पाई; e.g. नंढेपो, नंढपाई “youth,” from नंढो “young” (Skr. नन्द “son”); डाहप “wisdom,” from डाहो “wise”; वाहिप, पो, पी “watching,” from वाही “a watcher.”

In Bengali and Oṛiya it is not much in use, the Tatsama form being still generally retained.

In Panjabi the form is पुणा; the influence of the labial consonant having force to change the *a* into *u*,¹ e.g. बालपुण, बालपुणा “childhood.”

I would hazard the suggestion that the Skr. affix त्वं, त्वन्, is itself a relic of आत्मन्. If it be so, we see here a proof of what I have said above, that the म changes into व before being hardened to प.

¹ Trumpp, *Zeitschrift D. M. G.*, vol. xvii., pp. 166, 167.

Instances of द + व are—

Skr. द्वि "two," G. वे, S. व.

Skr. द्वितीय "second," G. बीजो, S. बीञ्जो, बीजो; cf. Latin *bellum* = *duellum* and *viginti* = *dviginti*, Skr. विंशति for द्विंशति.

Throughout the numerals, in fact, the *d* of *dvi* is dropped in all cases :

"Twelve," Skr. द्वादश, H. बारह, P. बारां, S. बारंहं, G. बार, M. बारा, B. बारो, O. बार.

"Twenty-two," Skr. द्वाविंशति, H. बाईस, P. बाई, S. बावीह, G. बावीश, M. बावीस, B. बाइश, O. बाइश.

"Thirty-two," Skr. द्वात्रिंशत्, H. बत्तीस, P. बत्ती, S. बटोह, G. बचीश, M. as H., B. as G., O. बत्तिरिश.

"Forty-two," Skr. द्विचत्वारिंशत्, H. बेआलीस, P. बत्ताली, S. बाएतालीह, G. बेतालीश, M. बेचाळीस, B. as H., O. व्यालिश.

"Fifty-two," Skr. द्वापंचाशत्, H. बावन, P. बवंजा, S. बावंजाह, G. as H., M. *id.*, B. बायन्न, O. बाअन.

"Sixty-two," Skr. द्वाषष्टि, H. बासठ, P. बाहठ, S. बाहठि, G. बासेठ, M. बासष्ट, B. बाषट्टि, O. बाषटि.

"Seventy-two," Skr. द्वासप्तति, H. बाहत्तर, P. बहत्तर, S. बाहतति, G. बोहोतेर, M. as H., B. *id.*, O. बाहोसरि.

"Eighty-two," Skr. द्वाशीति, H. बिआसी, P., S. *id.*, G. बासी, M. व्याइंशी, B. बिराशी, O. बिराशी.

"Ninety-two," Skr. द्वानवति, H. बानव्वे, P. बानवें, S. बिआनवे, G. बाणू, M. व्याखव, B. बिरानवइ, O. *id.*

Instances of थ + व and घ + व producing फ and भ I have not found; it would seem, however, that we may adduce here the words पुष्प "flower," and वाष्प "steam," from the roots पुष् and वाष्.¹ Thus, पुष् + त्वं and वाष् + त्वं would become पुष् + त्वं and वाष् + त्वं, and subsequently पुष्प, वाष्प, giving Pr. पुप्फ, वप्फ, and H. पुहप, फुप; and बाफ or भाप.

¹ The usual root is वा "to blow," but we may assume a root वाष् intermediate between वा "to blow," and वास् "to be fragrant."

Some confusion appears to have existed amongst the semi-vowels themselves when appended to dentals, as we find modern words in झ which cannot be derived from घ + य, but point distinctly to roots having ध्व, and even ध्म. As early as the Gatha period, whenever that may have been, this confusion seems to have been prevalent. Thus, we find घ्यापित for Skr. ध्यापित, probably in order to produce a sort of alliteration, as in the same line there is also ध्यासनात् for ध्वासनात्, so that the latter half of the line thus corrupted runs : ध्यान घ्यापित क्लेशध्यासनात् for ध्यान ध्यापित क्लेशध्वासनात्. This peculiarity may be connected with the custom, mentioned in § 25 as prevalent in modern Bengali pronunciation, of scarcely sounding a weak letter when forming the last member of a nexus, its presence being indicated by a sort of dwelling on the preceding letter, so that *dhm*, *dhw*, *dhv*, would all sound as *dh* with a slight stress on it; the change from one weak letter to another would thus be very easily effected, and the preference shown to *y* would result from its being easier to pronounce in such a position.

By means of this process certain modern words in झ may be explained; as झालर "fringe," झिलगा "tattered bedding," झिलमिल "a hanging shutter," झूलना "to swing," झूला "a child's swing," झूल "a loose trapping" for elephants, dogs, etc., झोला "a wallet," M. and G. झोळी; all of which may be referred to the root झल् (originally ध्वल्) "to shake" or "swing," which, even in Sanskrit, has passed into झ° in such words as झौलिका "wallet," which seems to come from this root, and not, as hitherto suggested, from झोडा "a betel-nut tree." *Jhodā* has all the look of a non-Aryan word, and though a small wallet to carry betel-nut is a very common appendage to native costume, it seems more in accordance with analogy to derive it as above.

(3.) र. This semivowel differs from the other two in so far that the action which it exhibits takes place both when it pre-

cedes and when it follows the dental. In fact, it will presently be seen that in some respects the cerebralization of the dental takes place more regularly and frequently when र precedes than when it follows. Sindhi indeed forms an exception to this remark, as it adopts the cerebral almost uniformly in both cases, but this is due to the already explained partiality of that language for cerebral letters, and in many cases the actual pronunciation retains a slight *r* sound together with the cerebral. Thus, from Skr. पुत्र "son," S. has पुट्, pronounced *puṭrū*; Skr. मित्र "friend," S. मिट् *mitrū*.

In Prakrit *rt* regularly appears as ट, the rule "*rtasya ṭaḥ*" (Var. iii. 22) being of almost universal application. He gives, however, no rule for *rd*; though he quotes in iii. 26 a few words in which this nexus migrates into ढ, yet he seems to regard these as special instances. In the modern languages the transition to cerebrals takes place in every grade of the organ, and is tolerably frequent, though by no means universal.

Examples :

र + त.

Skr. कर्तन "cutting," Pr. कट्णं, H. काटना, P. कट्णा, S. कटणु, B. काठन, O. काटिबा, M. काटणें (rare).

Skr. वर्तन "road," H. बाट, and so in all.

Skr. वर्तिक "a quail," Pr. वट्ठो, H. वटेर, P. *id.*, B., O. *id.*, S. बटेरो.

Skr. मृत्तिका "earth," H. मिट्टी, मट्टी, P. *id.*, G. माटी, B., O. *id.*, but M. माती.

र + थ.

Skr. चतुर्थ "fourth," B. चौठा, O. चौठ; the rest have थ, see below.

This nexus generally drops the *r* without cerebralizing the dental :

र + द.

Skr. कपर्द "cowrie," H. कौडी; see § 52 (2).

Skr. तर्दन "striking," H. ताडना, and so in all but S. (In Skr. this process has already taken place, giving rise to a secondary root तड्.)

र + ध.

Skr. वर्धकि "carpenter," H. बढई, B., O. *id.*, G., S. वाढो, M. बढई.

By way of contrast, another and longer list is now given of words in which the semivowel does not cerebralize the dental :

Skr. धूर्त्त "rogue," Pr. धुत्तो, H. धुत्ता, G. धूतो, S. धुत, also ढुटो.

Skr. वर्त्तिका "wick," "candle," Pr. वत्तिआ, H. बत्ती, M., P. *id.*, B. बाती, G., O. बति, S. वटि.

Skr. वार्त्ता "news," Pr. वत्ता, H. बात "a word," P., M. *id.*, G. वात, S. बाति.

Skr. कर्त्तरी "scissors," Pr. कत्तरी, H., P. कतरनी, M. कातर, S. कतरि, B. कतरन, O. कतुरा.

Skr. कर्दम "mud," H. कादो, G. कादव, O. कादुअ, B. कादा.

Skr. कार्तिक "October-November," Pr. कत्तिक, H. कातिक, P. कत्तक, S. कती.

Skr. कूर्दन "leaping," Pr. कुहणं, H. कूदना, P. कुहणा, G. कुदवुं, M. कुदणं, O. कुदिबा, B. कुदन. S. only कुडणु.

Skr. चतुर्थ "fourth," Pr. चउत्यो, H. चौथा, P., M. *id.*, G., S. चोथो.

Skr. चतुर्दश "fourteen," Pr. चउद्दह, H. चौद्दह, P. चौदां, G. चौद, O., B., M. *id.*, S. चौडुहं.

Skr. दर्दुर "frog," H. दादुर, G., P. *id.*, S. डेडुर.

In addition to the first four examples, which are from Var. iii. 24, that author also gives the following instances, which do not occur in the modern languages: *kitt* = कीर्त्ति "fame," *vattamānam* = वर्त्तमान "present," *āvatto* = आवर्त्त "whirlpool," *samvattao* = संवर्त्तक a name of "Baldev," *ñivattao* = निवर्त्तक "returning," *atto* = आर्त्त "hurt," *mutti* = मूर्ति "form."

The transition of this nexus into a single cerebral letter occurred more frequently in ancient than in modern times, because the distinction between the two groups of the lingual

series was not so clearly marked in those days as it was subsequently; but as instances are found in the Prakrit period of this transition, it may be advisable to point out that in several of Vararuchi's instances the original word probably had an **ल** instead of an **र**. Thus, **वर्तिका** "a wick," may be derived from **वल्तिका**, for **ज्वल**, from the root **ज्वल्** "to burn." The facility with which **ल** is thrown away in this particular root has been pointed out in the beginning of this section. **कर्तरी** may be compared with the Latin *culter*, *cultellus*. **धूर्त** is a sort of adjectival formation from **धृ** "to be crooked," which is only another form of **ध्वल्**, the original of **ह्रल्**. In **कीर्त्ति** the root is **कृ**, the presumably older form of which would be **किल्**, which may be compared with Greek *κέλομαι*, *καλέω*, *κλέω*, *κλέος*, and Latin *celeber*. Similarly with the group of words containing the root **वृत्**, though, on the one hand, connected with many roots in the cognate languages containing the *r*, yet, on the other, it is allied to **वृ**, with its relations *volvo*, *wälzen*, etc.

The nexus *lt* seems to be in some way disliked by Sanskrit, as it seldom or never occurs, and appears to have been changed in most cases into *rt*; but if in some cases the Prakrit word were formed direct from the older word which contained the **ल**, it would still exhibit the dental *t*, merely by dropping the **ल** according to the usual custom. The modern languages having got these words as early Tadbhavas through the Prakrit naturally retained the dental. But the practice of not changing the dental to a cerebral got more frequent as time went on, and muscles got lax, and the softer and more languid dental utterance came more into favour; and thus we see that in some cases, though the Prakrit gives the cerebral, the modern languages reject it and employ the dental instead. Thus:

Skr. **गर्दभ** "ass," Pr: **गड्डहो**, H. **गधा** (for **गदहा**), P. *id.* and **गहो**, G. **गधेडो** (dim.), B. **गाधा**, O. **गधा**; but M. **गाढव**, inverted from **गाढभ**. S., as might be expected, **गड्ड**.

The ट arising from ते is further softened into ड in the following :

Skr. गते "ditch," Pr. गडुो, H. गड "boundary," गडबड (*garbar*) originally applied to earth dug up and left in uneven heaps, hence anything in a tossed and tumbled state, topsy-turvy, higgledy-piggledy; also said of affairs in an unsettled state; it is the common equivalent for our word "muddle." गाडा "a ditch." गाडना "to bury," "to conceal treasure in the earth." गाडा "low land." P. गडुणा, S. गाडणु, G. गाडवुं. M. गडणे "to be buried," metaph. "to be absorbed in study or business." गडद "sound" (sleep), "thick" (darkness), "dense" (forest); also "buried," "sunken," "lost," and as a subst. "a quarry" or "pit." गडदेणे "to bury treasure in the earth." गडबड "confusion." गडबडणे "to be in a muddle," with derivatives गडबडां, गडबडाविये, etc. गाडणे "to bury." B. गड "moat of a fort." गडन "to dig," hence "to carve," "fashion," "fabricate." गडनिया "an artist," "artisan." गडान "to fabricate," "to cast metal," "to roll." गडबडि "confusion." गाडन "to bury." गाडा "pit," "hole," O. गडिवा, गडिअ, etc.

Similar to this is the treatment of प्रति = पति = पडि, mentioned in § 83 (1)—though in this case, owing to its always occurring at the beginning of a word and being, therefore, pressed upon by the weight of the following syllables, the ड is not doubled, as in the case of गडुो.

When र follows the dental, it cerebralizes in some instances, as in the following :

Skr. चित्र "spotted," H. चीट "chintz," M. *id.*, S. चिटो, G. कीट.

Skr. ब्रुट् "to break," H. दूटना, and so in all, except M. तूटणे.

Skr. पत्र "cloth" (already in Skr. पट्ट, पट), H. पाट, पट्टा, पट्टी, etc., a large group of words, and so in all.

Skr. गंची "goer" (fem.), H. गाडी "cart," M., O., B. *id.*, G. गाडुं, P. गडुी, S. गाडो.

Skr. बुद्रक "young," B. खुडा "father's younger brother," O. खुडाता.

Skr. चस् "to fear" (p.p. चस्त), S. दहणु (p.p. दठो).

But more frequently, especially in the class of words ending in च, the र simply disappears, and the त remains unchanged. Thus :

Skr. क्षेत्र "field," Pr. क्षेत्र, H. खेत. See § 81. .

Skr. गात्र "limb," Pr. गत्त, H. गात, M. *id.*, S. गाटु ("neck").

Skr. गोत्र "family," Pr. गोत्त, H. गोत; so in all, but S. गोटु.

Skr. पुत्र "son," Pr. पुत्तो, पुत, पुडो, H. पुत, M. पुती, O. पुच्च, S. पुटु.

Skr. रात्रि "night," Pr. रत्ती, राई, H. रात, B., O. राति, M., G. रात, P. रत, रात, and in this case even S. has राति with a dental.

Skr. त्रीणि "three," Pr. तिस्त्रि, H. तीन, M. *id.*, B., O. तिन, P. तिन, G. तण, S. टे.

Skr. सूत्र "thread," Pr. सुत्त, H. सूत, O., B., M. *id.*, P. सुत्त and सूतर, S. सुटु.

Skr. चंद्र "moon," Pr. चंदो, H. चांद, and so throughout, except P. चंद, S. चंडु.

Skr. निद्रा "sleep," Pr. निद्रा, H. नीद, P. *id.*, G. निह्, M. नीद, नीज, S. निडु.

Skr. गृध्र "vulture," Pr. गिद्धो, H. गिध, B. *id.*, M. गीध, गीद, G. गिद, P. गिद्ध, S. गिझ.

Sindhi here in all but two instances adheres to the cerebral, which, as noted above, bears the sound of *tr*. There is almost complete unanimity between all the other languages. The class of words now under discussion affords additional confirmation to the already mentioned theory, that the tendency towards cerebralizing the dentals under the influence of र is one which was much stronger in ancient times than in modern, and that the tendency in question has been gradually growing weaker and weaker as time went on. These words are all, or nearly all, modern Tadbhavas. खेत shows itself to be modern by many

signs: first, it has the change of च into ख, which we have shown in § 83 to be a later process than that into छ; secondly, it has lost the accent; and, thirdly, there exists an older word खेडा *kherā*, which, though now used to signify “a mound of ruins,” “the site of an ancient town,” undoubtedly originally meant “a field” or “spot.” The signification of “a site,” now attributed to *kherā*, agrees with the original Sanskrit meaning of the word, which was not, as in modern times, so much “a cultivated plot of land” as “a possession,” “an estate”; hence “a definite locality” or “site.” The word *khet* is hardly a regular peasant’s word to this day. The peasant uses a dozen other words to express his cultivated land. In Gujarati, which has preserved a great many archaic Hindi forms, we have the analogous खेड. खेडा is a regular formation through खेटा,¹ where the dental is duly cerebralized, and subsequently softened to its media, and the last syllable with its long vowel preserves the oxytone type of the Sanskrit. खेत, on the other hand, appears to have arisen from separating the nexus and writing खेतर, a form still preserved in P. and O.,² as also सूतर. Similarly we have in G. धोतर “a loin cloth,” Skr. धौच, H. धोती. In the combinations derived from चि “three,” we see the same process at work, though the र has in most instances been elided. चंद्र became चंदर, a form which still survives as a proper name. In Kashmiri there occur several forms, as सुतर “urine,” Skr. मूत्र, Modern H. मूत.

Thus, the conclusion to be arrived at is this, that the words of the form खेडा, पुडा, etc., are early Tadbhavas, and those of the form खेत are modern Tadbhavas. It does not militate against this theory to urge that in Prakrit also the र is assimilated, producing त्त, from which the single त of the moderns might regularly have arisen, because such forms as खेतर, which

¹ खेट is found in Skr. in the sense of “a village,” where it is evidently a dialectic or Prakritized form of चेच.

² Thus, the tract of country round the temple of Jagannath at Puri is known as पुरुषोत्तम खेतर, vulgo *Purustam Khetar*, or *Siri Khetar*.

reveal a consciousness of the existence of the ॠ , could not have come through the Prakrit, which has altogether lost that letter.

§ 86. The last form of nexus remains to be considered. The weak nexus, as I have called it, consists entirely of weak letters, the nasals, semivowels, and sibilants, together with ॠ . From the nature of its component parts, this nexus requires to be treated even more in detail than the mixed nexus, because, though both its elements are weak, yet they are not equally so. It is frequently found that one of them yields to the other, and is, as in the other classes of nexus, assimilated in Prakrit and rejected in the modern languages. An interesting and important inquiry thus arises as to what is the comparative strength of the various classes. Is the nasal stronger than the semivowel, for instance, or weaker? To answer this it will be necessary to go through each description of combination separately. There are the following descriptions, exclusive of ॠ :

- (1.) Nasal combined with nasal.
- (2.) Nasal with semivowel.
- (3.) Nasal with sibilant.
- (4.) Semivowel with semivowel.
- (5.) Semivowel with sibilant.

The combinations of ॠ will form a separate section, for reasons hereafter to be given. In the above list, numbers 2, 3, and 5 include their respective opposites; thus, under 2 are included combinations in which the semivowel precedes, as well as those in which it follows, the nasal; because in the weak, just as in the mixed, nexus the relative position of the elements has no influence on the treatment, except in number 4, where in some cases the two semivowels appear to be of equal strength, and the question which of them shall be assimilated to the other is at times decided by position. In such cases, however, in accordance with the general principles of the seven

languages, the stronger of the two elements holds its place, or rather has a tendency to do so, and the weaker inclines to be assimilated, and subsequently disappears.

In this nexus, moreover, there are two further sources of irregularity; the first, that the semivowels *y* and *v*, as usual, oscillate backwards and forwards, appearing at one time hardened into *j* and *b*, at another relaxed into *i* and *u*; the second, that this form of nexus is more liable than any other to be dissolved by the insertion of a vowel between its component parts.

We shall now go through the various descriptions of weak nexus seriatim in the order given above.

§ 87. NASAL WITH NASAL.—This combination is from the nature of the case very rare. It is of course impossible in Sanskrit for two nasals of different organs to be joined: **ञ** and **ण** could not combine. Therefore the only combinations which, as far as I am aware, actually occur are **न + म** and **म + न**. With regard to the former of these, Vararuchi directs the assimilation of the preceding to the following letter: **जन्म** becomes **जम्मो**, and **मन्मथ** by a curious set of changes **वम्महो** (iii. 43). The latter word does not occur in modern times save as a Tatsama. **जन्म** is always dissolved into **जनम्**, and is in this form a very much used word. P., however, has in addition the curious variations **जंम**, which is the Prakrit form above, and **जंमण**, as also the vulgarism **जरम** in the spoken language. Such formations as might be expected to occur from the addition of the formative syllable **मन्** to roots ending in **न्** do not survive to modern times, because the modern languages in the vast majority of Tadbhavas retain nothing of the Sanskrit elements beyond the root, and form their secondary words by additions of a different type. Roots like **तन्**, **मन्**, **हन्**, occur often as the basis of modern words, but with entirely modern affirmatives. Similarly in the case of the nexus **ञ** I have not found modern instances. **निञ्ज**

“below,” is used in B. and O., but as a Tatsama. The name प्रद्युम्न becomes, according to Var. iii. 44, पञ्चुषो, but when used in modern or middle age religious poems, it is written as a Tatsama, or divided, as प्रद्युमन, according to the caprice of the writer. That the nexus itself is easily pronounceable by modern organs is shown by the fact that the river in Skr. यमुना is now ordinarily known as the Jamnâ, a word which would be correctly written जम्बा, though in writing the old spelling जमुना is generally adhered to.

§ 88. NASAL WITH SEMIVOWEL.—In this form of nexus the nasal is as a rule the stronger, if strength be measured by tenacity. The combinations that occur with य, the first semivowel, are ण्य, न्य, and म्य. No combination of this semivowel with the nasal ज of its own organ is met with. Examples of ण्य and न्य are as follows :

ण + य.

Skr. अरण्य “desert,” Pr. रणं, H. रन, S. रिणु, रज, G. रान, M. *id.*

Skr. आरण्यक “wild animal,” H. अरणा “wild buffalo,” P. अरना, B., O. *id.*

न + य.

Skr. अन्य “other,” Old H. अनि.

Skr. शून्य “empty,” H. सून and सूना, M. सुन, P. सुना, G. शुन, सून, S. सुजो, O., B. शून्य.

Skr. धान्य “grain,” H., P. धान “rice,” O., B. *id.* and धान्य, M., G. धान, S. धाजु.

Skr. कन्या “maiden,” Pr. कंजा, H. and the rest Tatsama. P. कनिआ, S. कजा.

Skr. न्याय “justice,” H. न्याव, P. निआउ, निआइ, S. *id.*, B. Tatsama and नेओ.

Vararuchi (xii. 7) mentions a Sauraseni transition into झ in

ब्रह्मण्य = ब्रह्मज्ञो, or ब्रह्मज्ञो, which is so natural a transition that one is surprised not to find it more frequent. No similar instances have, however, met my notice. The general treatment is to resolve the य into इ, as in अग्नि, and then to reject it entirely, leaving only न्; P. often stops short at the first of these two stages. S. by virtue of its peculiar sound, expressed by ज, is able to retain the original pronunciation unaltered; कजा sounds *kanyā*, identical with कन्या.

With regard to म्य, we have instances only in the Prakrit period, where it goes into ज्ञ, as in सज्जदो, सज्जादो, also written संजदो, etc., for सम्यत, सम्यात (Var. ii. 7). It also (in iii. 2) changes into म्, as सोम्मो for सौम्य. The latter of these changes is more in harmony with modern practice, and the word itself probably reappears in M. सोव "trickery." There do not appear to be any other well-authenticated instances of this nexus in the modern languages. Such Sanskrit forms as ग्राम्य are represented by ग्रामी and the like, where it is doubtful whether the ई is really derived from the य, or is a modern independent formation; most probably the latter is the case.

र is attached to म in two instances:

Skr. आम्र "mango," Pr. अंबं, H. आम and अंब, B., O. *id.*, P. अमब, S. अंबु; also in Lār आमो, आमी, M. अंबा, G. आबो.

Skr. ताम्र "copper," Pr. तंबं, H. तांबा, P. *id.*, S. टामो, G. तांबु, M. ताबिं, O. तामक, B. तामा.

Here the semivowel disappears, and in some cases the nasal is thickened into the media of its organ with anuswāra.

For the nexus ख, the only nasal combination into which ख enters, the instance of अखिका "tamarind," may be referred to. (Chap. II. § 34.)

क्व and ख्व occur respectively in क्विन् "yeast," S. किन्, and कख, the name of a Rishi. The gentleman seems to have been forgotten in modern times.

From the comparatively barren ground of that form of nexus

in which the nasal precedes the semivowel, we now pass to a more fertile field. The semivowels र and ल precede ण, न, and म, and the first of these combinations is exceedingly common :

र्ण.

Skr. ऊर्ण "wool," Pr. उर्ण, H. ऊन, P. उन्न, S. उन, G. *id.*

Skr. कर्ण "ear," Pr. कणो, H. कान, and so in all except P. कन्न, S. कनु.

Skr. प्राघूर्ण "guest," Pr. पाङ्गणो, H. पाङ्गना, G. पोणो, M. पाङ्गणा, पाहोणा.

Skr. सुवर्ण "gold," Pali सुवण्ण and सोन्न, Pr. सोणं, H. सोना, P. *id.*, S. सौनु, G. सोनु, M. सौनं, B. सोणा, O. सुना.

Skr. पर्ण "leaf," Pr. पणो, H. पान, restricted to the signification of betel-leaf used for chewing, and so in all, except B. and O., which have पाण.

Connected with the word प्राघूर्ण is the common verb H. पङ्गचना, P. पङ्गचणा, S. पङ्गचणु "to arrive," G. पोचवुं, M. पोहंचणें, B. पङ्गचन, O. पङ्गचिवा; though I am not sure where the च comes from.

The general rule, it will be seen, is assimilation, and subsequent elision of the र; but there are certain exceptions to be noticed :

Skr. चूर्ण "powder," H. चूरा, P. चूर, S. चूरो, G. चुरो, M. चूर, B. चूर, O. चुरा.

Skr. पूर्ण "full," H. पूरा, P. *id.*, S. पूरो, G. पुरो, M. पुरा, B. पूरा, O. *id.*

In these two words it is the nasal which has disappeared, if the derivation be correct. There is room, however, for doubt on this head. The modern languages so constantly form their words in a way of their own, taking nothing from Sanskrit but the root, that it may fairly be assumed in the case of these two words that they are derivatives from roots चूर and पूर, and

have nothing to do, beyond a community of origin, with the two passive participles above given. This is confirmed by the fact that there is also in existence a very common word in all the languages which is derived from घूर्ण, according to the ordinary rule of assimilating the semivowel. This word means "lime," and is as follows :

H. चूना, P. चूना, चूनी, S. चुनु, G. चुनो, M. चुना, B., O. *id.*

Unfortunately no light is thrown on the matter by the other past participles of roots in च्, all of which take this form in Sanskrit, as they are only used, if at all, as Tatsamas; showing how rarely a Sanskrit inflectional form is preserved in the modern languages. From the roots of this class कृ, गृ, जृ, तृ, दृ, पृ, शृ, derivatives in abundance may be found, but of words specially derived from the past participles कूर्ण, गीर्ण, जोर्ण, and the rest, it would be difficult to adduce any examples. I am, therefore, of opinion that चूरा and पूरा should be referred merely to the general root, and not to the participle, while चूना is derived from the participle, not regarded as a participle, but as a noun, into which latter phase it had already passed in Sanskrit.

A somewhat similar argument may be applied to a class of words of a double form derived from the root घूर्ण "to revolve." These are :

(a) H. घुरना, घूरना, etc., P. *id.*, S. घुरणु, घूरणु, etc., G. घुरवुं, B. घुरण, O. *id.*

(β) H. घुमना, घुमडी, etc., P. *id.*, S. घुमणु, घुमिडो, G. घुमवुं, M. घुमणै, B. घुमन, घुमडी, O. *id.*

In the first set of words we have both the *r* and *ṇ* preserved by splitting, and the form घुरना has probably arisen from Skr. घूर्णन through an intermediate stage घुरणनौ, one *n* being rejected. That this word has been long in use and lost much of its old character is shown by the fact that its meaning has

altered from the primitive sense of turning round into a variety of secondary senses, such as "to stare at" (*i.e.* "to roll the eyes") and the like. This form is all plain sailing, but there is much difficulty in the second form घुमना, which is of much more frequent use in the sense of *revolving*. घुमडी means *giddiness*, and there are several derivatives with the sense of *reverberating*, *roaring*, etc. I can only account for the presence of the म by supposing that after the absorption of the र, the influence of the labial vowel has been strong enough to draw over the nasal ण into its own organ. This explanation is not altogether satisfactory. Prakrit takes as its base घुण, a dialectic form of घूर्ण, and changes the ण into ल, making its verb घोलइ (Var. viii. 6); the form घुम° in the moderns must therefore be post-Prakritic, that is, a late Tadbhava.

Of the nexus र्म a few examples will suffice, as it is perfectly regular :

Skr. कर्म "work," Pr. कम्मो, H. काम, and so in all, except, as usual, P. कम्म and S. कम्.

Skr. चर्म "skin," Pr. चम्मो, H. चाम, and so in all, except, as usual, P. चम्म and S. चम्.

In the latter of these words by far the most common form in use is H. चमडा, P. *id.*, M. चमेड, G. चमडो, B. चामडा, O. *id.* Inasmuch as early Hindi authors are very careless about the ड, when it has the sound of *r*, often writing it र, this word is sometimes seen in the form चमरा, and this has apparently misled grammarians and others into considering that we have here a case of inversion of the two letters र and म; but independently of the consideration that this does not account for the final long *ā*, which has no business there if the word is merely a reproduction of चर्म, a word accented on the penultimate, it seems so obvious as hardly to need explanation that चमडा, like dozens of other words of similar form, is a diminutive, the syllable डा or डी having that import in all the modern lan-

guages, and the long *ā* of the primary word चाम has been shortened, according to custom, on receiving a heavy affixed termination. The same process takes place when चर्म is the first word in a compound, as in चर्मकार "worker in leather." H. चमार, and so in all except Bengal, which, with its usual regardlessness of quantity, writes चामार, but pronounces the first syllable in such a way that no one could tell whether it was long or short. M. has an altogether irregular form चाम्हार, which probably owes its ह to some fancied similarity to कुम्हार or कुंभार "a potter" (कुम्भकार). Analogous to चमार is कमार "a blacksmith," which even in Sanskrit times had been shortened from कर्मकार into कमार, unless indeed we prefer to regard it as derived from कर "hand," and मार or मारक "smiter," a derivation which does not commend itself to my judgment at least. Another word of the same class is कमरंगा, a sort of acid fruit, from Skr. कर्मरंगा. It is needless further to dwell on this simple and regular nexus, and there is in like manner very little to be said of ल. The commonest instance is the following :

Skr. शाखली "silk-cotton tree," H. सेमल, सिम्बल, P. सिमबळ, सिम्मळ, M. सांवर, B. शिमुल, O. *id.* and शिमिलि, where the ल disappears, and other corruptions of a varied and complicated nature arise, which need not be here discussed.

Combinations in which ल precedes any other nasal than म are not to be found.

§ 89. NASAL WITH SIBILANT.—The forms in use are षण, ख, झ, ञ, ष, ख, रम, in all of which the sibilant precedes the nasal. When the nasal comes first, it generally, if not always, takes the form of anuswāra in Sanskrit, and universally so before every sibilant in Prakrit (Var. iv. 14, and note). There is nothing peculiar therefore or that need detain us in this particular, and we may pass at once to the nexus in which the sibilant precedes. The general rule is that the sibilant dis-

appears, leaving behind it ह, which is put *after* the nasal. The following are examples :

श + न.

Skr. प्रश्न "question," Pr. पण्हो. } Not in use, except as Tatsamas, in
Skr. शिश्न "penis," Pr. सिण्हो. } the modern languages.

ष + ण.

Skr. कृष्ण "Krishna," Pr. कण्हो, H. कान्ह. (See § 43.)

Skr. विष्णु "Vishnu," Pr. विण्ह. As a Tatsama in moderns. B. बिष्टुं,
O. *id.*, M. विट्टल.

Skr. उष्ण "warm," Pr. उण्हो, M. ऊन्ह, S. उज "thirst."

Skr. तृष्ण "thirsty," Pr. तण्हो, H. तिरखा, P. तिहा, S. टिह, M.
तहान.

स + न.

Skr. स्नान "bathing," Pr. ण्हाणं, H. न्हाना, P. न्हाउणा, G. नहाण,
M. *id.* and नाहणं.

Skr. स्नुषा "daughter-in-law," Pr. सोण्हा, M. सून.

Skr. स्नेह "friendship," Pr. सण्हो, णेह, H. सनेह, P. *id.*

Skr. स्निग्ध "oily," Pr. सिणिद्धो.

स + म.

Skr. स्मरण "remembering," Pr. भरणं (म्हरणं), H. सुमिरन, P.
समरन, G. समरवुं.

Skr. स्मृति "memory," H. सुरत, P. *id.*, S. सुर्ति.

Skr. विस्मय "surprise," P. विम्हओ.

ष + म.

Skr. ग्रीष्म "hot season," Pr. गिम्हो, Old H. गरीसम, M. गीम, गिम्ह.

Skr. उष्म "hot season," Pr. उम्हो, M. उम्हळ.¹

Skr. पक्ष "eyelash," Pr. पम्हो.

¹ With the secondary senses of *qualmishness*, caused by heat of stomach, or of swelling and inflammation from a bite or sting; also of *fruits ripening from heat*, etc.

श + म.

Skr. रश्मि "rein," H. रास, G., B. *id.*

Skr. कश्मल "weak," H. कुम्हलाना "to wither."

Skr. कश्मीर "Kashmir"; in all कश्मीर, or, owing to Persian influence, काश्मीर, کاشمیر.

Skr. श्मश्रु "beard," Pr. मस्सू, मंसू, H. मूकें. (See Chap. II. § 34.)

Skr. श्मशान "burning ground for corpses," Pr. मसाणं, H. मसान, P., G. मसाण, S. मसाणु, M. मसण, B. मशान, O. मशाण.

In the above list are grouped together both those words which observe the rule and those which deviate from it. It will be seen that, while Prakrit exhibits in a majority of cases the combinations रह् and म्ह, the modern languages as a rule reject the ह. M. is closest to the Prakrit in this respect. In H. तिरखा we have perhaps a derivative not from तृष्ण itself, but from some cognate form, such as तृषा. In M. तहान inversion has taken place from an older form तह्ना, just as we have in the same language नाहणें for न्हाणें, and the like. सनेह probably preserves the two elements in consequence of the difficulty of pronouncing one ह so soon after the other; न्हेह would be a very awkward word to utter. In मस्सू and मसाणं the rejection of the ह has begun as early as Prakrit; and रास from रश्मि is altogether irregular. झुषा, though put down under the head of स + न, is really an example of ष + ण, because there must have been a metathesis into सुष्णा to produce the Pr. form सोणहा. Had no such metathesis taken place, the Prakrit form would have been रहोसा or रझसा; from which comes नूह, used in some rural dialects of Hindi, and नुहं Sindhi.

§ 90. SEMIVOWEL WITH SEMIVOWEL.—(1.) य can only follow another letter; it cannot take the first place in the nexus. It can be preceded by the other three semivowels, giving the combinations र्य, ल्य, and व्य.

यं. The fight is nearly equal between the two letters; sometimes one yields, sometimes the other. Examples :

Skr. कार्य्य “business,” Pr. कज्जं (Maharashtri), कथ्ये (Māgadhi), कच्चं (Paisāchi), H. काज, कारज, P., G. *id.*, S. कार्जु, M. काज, O., B. कार्य्य (pronounced *kārjyo*).

Skr. पथ्यं “bed,” Pr. पल्लंको, H. पलंग, and so in all. P. पलंच, probably by an error of the dictionary writer, for पलंग, like all the rest.

Skr. पथ्याण “saddle,” Pr. पल्लाणं, H. पलान, पालान, P. पलाण, S. पलाणु, M. पालाण and पलाण, G. पलाण, पलाणो, B. पालाण, O. पलाण.

Skr. चौर्यं “theft,” Pr. चोरिञ्चं, H. चोरी, and so in all.

Skr. सूर्य “sun,” Pr. सूरौ and सुज्जो, H. सूरज, P. *id.*, S. सूर्जु, G. सुरज, सूर, M., B., and O. Tatsama.

Skr. तूर्य “trumpet,” Pr. तूरं, H. तूरी, तूरही, P. तुरम, S., G., O. तूरी, B. तुरुम.

Skr. आश्चर्य्य “wonderful,” Pr. अच्चेरं, H. अचरज, P., S., G. *id.*

Prakrit has other instances not found in the modern languages. These are *dhātram*, *sunderam*, *perantam*, for *dhairyam*, *saundaryam*, and *paryanta*. Also *soriam*, *viriam*, for *saurya*, *vīrya*; and the word *soamallam* for *saukumārya*. We also find such forms as *ajjo* for *ārya*. Of these and the modern words it is somewhat difficult to speak with confidence. On the whole it appears that in words where the र is the last letter of a root and च the initial of a mere formative syllable, the latter is softened to a vowel which is in Prakrit short इ, but generally in the moderns ई long. This process is seen in *chaurya*, Pr. *choriam*, modern *chorī*. Secondly, in words which, though originally formed in the same way as the first class, have got into general use as simple nouns, whose participial or secondary character has been forgotten, the modern languages generally split the nexus and harden the च to ज. This is the most common method of treatment, and is exhibited in a great

number of words, as *sûrya* = *sûraj*, *kârya* = *kâraj*, *bhâryâ* = *bhârajâ*, *maryâdâ* = *marajâd*. The words of this form are late Tadbhavas, which must have come into use in the tenth century. Belonging to this class are a few early Tadbhavas which retain the Prakrit practice; namely, they consider the य as ज, and thus obtain a mixed nexus जै, in which, of course, the र is assimilated, as in *kârya* = *kajjam* = *kâj*. Thirdly, in one or two exceptional words the र changes to ल, and thus preserves itself and absorbs the य; in consequence of which absorption the ल is doubled, as in *pallanko* for *paryanka*. Of course the double ल is reduced to a single in the modern languages, but the preceding vowel is not generally lengthened, owing to the weight of the following syllable. In the form पालाण the influence of the Persian پالان is traceable, the first vowel being long in that language. For those cases in which the य, having first been softened to इ, exercises a retrospective effect on the preceding vowel, as in *achchheram*, *sunderam*, etc., reference may be made to Chap. II. § 34. The treatment of the word तिर्यक् "crooked," is peculiar. It becomes H. टेढा, P. *id.*, S. टेड़ो, G. टेड़ु, टेरु, M. तेडा, तिडा, तेढा, O. टेरा, B. टेडा, तेडा, and तेउडा. Here the य has disappeared, and the र has changed in some cases to ड, and in all but M. and B. even the initial त has been drawn into the cerebral organ. This strangely distorted word stands alone in the processes it has undergone, and I am almost tempted to look on it as a non-Aryan word, which has been Sanskritized into तिर्यक्, while its older and rougher form has remained in popular speech. Or if it is Aryan the last element, अङ्ग, may not have entered into the composition of the modern word, which perhaps represents only तिरस्. In any case the word is an enigma.

ल. Examples:

Skr. कल्य "dawn," Pr. कल्ल, H. कल्लह, कल, P. कल्ल, कल्लह, S. कल्लह, कल्लह, G., M. काल, O. कालि, B. *id.*, also काइल. These words mean

“to-morrow,” also “yesterday”; in B. and O. the word गत or गला “gone,” is prefixed when the latter meaning is intended.

Skr. तुल्य “equal,” H. तुल, P. तुल्ल, S. तुलु; the others have the Tatsama.

Skr. मूल्य } “price,” H. मोल, P. मुल्ल, S. मुल्ल, M., G. मोल, B. *id.*,
Skr. मौल्य } O. मूल.

In these instances the ल retains its place, and the य either disappears altogether, or is changed into ह, or is softened to र. In no case does the य prove stronger than the ल, nor have I found any instances of its being preserved by hardening into ज, as in र्य.

व्य. In this nexus the व universally becomes ब, thus forming a mixed nexus, so that the य is inevitably absorbed, or at best remains in its vowel form र. A few instances will suffice:

Skr. व्यंग्न “division,” H. बाहना, P. बंकुनया, S. विर्हणु.

Skr. व्याघ्र “tiger,” H. बाघ, and so in all.

Skr. व्यतीत “passed,” H. बितना, P. बितीतया, O. बितिवा, G. वटवुं.

Skr. व्यङ्ग “frog,” H. बेंग, B., O. *id.*, G. भेक (?).

Skr. व्यापारी “merchant,” H. बेपारी, पैपारी, व्यापारो, M., G., B., O. *id.*

Such words as कृत्त “raw flesh,” द्रव्य “thing,” गव्य “relating to a cow,” do not occur in the modern languages, except as Tatsamas. In the old poets such forms as दरव, however, are occasionally met with.

(2.) र. This semivowel can both precede and follow. Thus we have the following combinations, र्य र्व र्ल; the first of which has been discussed above; also व्र and वृ, though the combination of ल with र does not to my knowledge take place. र्व is usually treated as if the व were ब, and the र is consequently assimilated. Instances are:

Skr. सर्व “all,” Pr. सद्धो, Old H. अरव, सरव, H. सब, P. सभ, सरव,

S. सभु. सब is used, but rarely, in G. and B., though the Tatsama is common in both, and in M., O. सभु.

Skr. चर्वण "chewing," Pr. चञ्चणं, H. चाबना, P. चञ्चणा, S. चवणु, G. चाववुं, M. चावणें, B. चाबिते, O. चोबाइबा.

But in late Tadbhavas both letters are retained by splitting the nexus, as :

Skr. पर्वन् "festival," Pr. पव्वो, H. परब, P. *id.* In the rest as a Tatsama पर्व, but S. has a form पिंभु as well.

Skr. पूर्व "former," "east," Pr. पुव्व, H. पूरब, P. *id.* In the rest as a Tatsama पूर्व.

व्र is not a very common nexus, and is generally treated as व्र. In late Tadbhavas initial व्र is split, व becomes व, and the र is sometimes joined to the following consonant, just as we saw was the case with प्र (see § 83). Thus :

Skr. व्रत "vow," H. वरत or वर्त, P. वरत. In the rest Tatsama.

In cases where the nexus is followed by a long vowel, the र is not joined to the following consonant, as in व्रात "marriage procession," H. वरात, and so in all. व्रज "a cow-pen," is in H. often pronounced and written वरज, also बिर्ज, and so in most languages. The O. वरज "a pâṇ-garden," is also probably from the same word, in the general sense of "an inclosure."

Skr. तीव्र "sharp," is only used as a Tatsama.

It is unnecessary to go further into separate notice of व and ल, as they have already been spoken of under य and र. The question that arises is, which is the strongest of the semivowels? To this it may be replied, that व from being so constantly confounded with ब becomes virtually the strongest; it would, however, be the weakest but one if it did not do so, as in the other direction it would soften to उ. य in like manner when hardened to ब is more tenacious than the two remaining semivowels, र and ल. These latter cannot harden or soften in any way, and

hold therefore a middle place. The order of strength of the semivowels stands consequently as follows :

- (1.) व when regarded as व.
- (2.) य when regarded as ज.
- (3.) ल.
- (4.) र.
- (5.) व when softened to उ.
- (6.) य when softened to इ.

Instances of number 5 in a weak nexus are rare, if they exist at all. Words like उल्ल “womb,” उल्लण “abundant,” might supply examples if they were in use. The mixed nexus illustrates what is meant, in such cases as दि=दो, etc.

When the two members of the nexus are of nearly equal strength, the problem is solved by splitting them asunder and inserting a vowel.

§ 91. SEMIVOWEL WITH SIBILANT.—With the semivowel preceding, which is less frequent than the reverse order, we have with र the combinations र्ष and रश्. On the analogy of the general treatment of the sibilants in Prakrit and the early Tadbhava period, we should expect to find both these kinds of nexus result in र्ह, but this form does not generally, if ever, occur. ष is so constantly regarded in the modern languages as ख that it necessarily introduces some confusion into the development of those groups, whether of the mixed or weak nexus, in which it occurs.

Of the early Tadbhava period perhaps the best example is—

Skr. कर्षण “dragging,” H. काढ़ना (*kāḍhnā*), P. कड्डना, S. कडणु, G. काहाडवुं, M. काढणं, B. काड़न, O. काढ़िवा.

In this case it would appear that the ष had in the first instance migrated into ह, producing र्ह, but that the cerebral nature of the sibilant had led to a change of the liquid र into ड, which combining with ह produced ढ.

But even in this class of words there are found cases where the ष changes to स and absorbs the र, as—

Skr. शीर्ष “head, Pr. सिस्सो and सीसो, H. सीस, P. *id.*, S. सिसी, G. शीश, M. शींस and शीस.

Similar to the last instance but one is the following:

Skr. निष्कर्षण “taking out,” Pr. निष्काल, but Pali निष्कड्डु (Mahāvanso, p. 26), H. निकालना and निकासना, P. निकासणा, निष्कासणा, निकसाणा, निष्काळणा, etc., S. निकारणुं, निकेरणु, निकराईणु, G. निकाळवुं, निकासवुं, M. निकाटणें, निकाल, etc., B., O. not used.

These words are extremely common. Of the two sets of forms that whose root ends in ऊ and ल has been formed by carrying the process of काढना a step further, and modulating the ढ into ऊ and ल, as in so many other cases (see Chap. III. § 60); while that ending in स is produced by the same process as सीस, namely, by assimilating the र. In Sindhi the ल of the other languages has been changed into र, in accordance with the usual custom of that language (see Chap. III. § 61). The derivation sometimes given from निष्कास fails to satisfy the requirements of the case, as it does not account for the cognate forms in ल, etc., though it may be urged that the two forms are separate: that in ल being from निष्कर्ष, while that in स is from निष्कास.

Another case of assimilation of the र is S. वसणु “to rain,” Skr. वर्ष, but in this instance S. stands alone, as will be shown presently.

Opposed to this is the rejection of the sibilant in—

Skr. मार्गशीर्ष “November-December,” O. मागुशीर, माघुशीर, *valgo* मगुसर, P. मघर (for मगहर), S. मंघिह.

P. and S. here characteristically change the श into ह.

In the late Tadbhava period this nexus is treated by splitting, ष being as usual changed to स. Thus:

Skr. वर्ष "the rains," Pr. वरिसो, H. बरसा, बरसात्, बरसना "to rain," and so in all; P. बरहा and वरहा.

Skr. सर्षप "mustard-plant," H. सरसों, P. सरहों, S. सर्हा, G. सरसियुं, B. सरिष, सरिश्, O. सुरसा, सोरिष.

वर्ष takes in modern times the meaning of "year" (just as we say, so many summers or so many winters), and then becomes H. बरस, P. *id.*, so in B., O.; S. has बर्ह्यु. In the others it occurs as a Tatsama only. H. has also a form बरखा in the sense of "rain," and बरख among the rustics for "year." So also G. बरखे *adv.* "yearly," P. *id.*, also बरखारत (वर्ष + ऋतु) "rainy season." These forms arise from the change of ष to ख, and a similar case is H. हरखना "to rejoice," Skr. हर्ष, where, however, S. has सरहो for सहरहो = Skr. सहर्ष.

An isolated case of absorption of र and change of ष to ह is afforded by the early Tadbhava Skr. कार्षापण a certain "coin" or "weight," Pr. काहावणो, H. कहान "sixteen pāṇs" (or 1280 kowrees), O. काहाण, B. काहण. The word does not seem to be in use in Western India.

र्ष is treated like the more regular developments of ष; that is to say, in the early period र is absorbed, in the later the two elements of the nexus are split; in the first instance anuswāra occasionally replaces the lost र.

Examples are—Of the earlier treatment:

Skr. पार्श्व "beside," H. पास, P. *id.*, S. पासे, पासो (subst. = पार्श्व), G. पासे, M. पासो, पासून.

This is the same process as that in शीर्ष = सीस.

Skr. स्पर्श "touching," Pr. फंसो, (1) H. फसना and फंसना, M. फसलें, G. फसवुं, S., P. *id.* = "to stick in the mud," etc.; (2) H. फांसना, फांसो, and in all the rest, P., S. also फाही = "to hang."

Of the later treatment :

Skr. स्पर्श "touching," H. परस, पारस, परसना, P. *id.*, G. पारस, M. परस, etc.

In the second of the two groups the aspirate फ shows that an स has been rejected from the beginning of the word, and we are thus compelled to go back to the root स्पृश्, and not, as some would prefer, to the Skr. पाश "a noose."

With the sibilant preceding there are many combinations, as, श्र, श्र, श्र, श्र; श्र, श्र; श्र, श्र, श्र. As far as the sibilants are concerned, they may all be treated under one head, there being no difference between them.

श्र, श्र, श्र.—The last two are rare, and the former is more frequent as an initial. The श्र disappears entirely; in no case leaving any sign of its having gone through the vowel stage :

Skr. श्राम "black," H. साम, P. स्हाम,¹ M. शाम.

Skr. श्रामल "swarthy," H. सांवला (see § 65), B. शामला.

Skr. श्राल or श्राल "brother-in-law," H. साला, P. साळा, S., G. सालो, G. also साळो, M. साळा, B. शाला, O. Tatsama.

Skr. श्रालीवोढा "wife's sister's husband," H. साढू, P. *id.*, S. संढू, G. साढू, M. *id.*, and साढू.

Skr. श्रवश्चाय "hoar-frost," "dew," H. ओस "dew," P., G. *id.*, B. ओष.

Skr. पुष्य } "December-January," { H. पूस, P. पोह, S. पोड, G. and
Skr. पौष्य } M. Tatsama, B. पौष, O. पूष.

Skr. कांस्य "bell-metal,"² H. कांसा, P. कांसी, S. कंझी, G. कांसुं, M. कांसिं, B. कांसा, O. *id.*

¹ This is the only way I can think of for putting the Panjabi word into Devanagari. स with a little loop at the bottom, meant to represent ह, is the regular way of writing श in the Gurmukhi character.

² Not "brass," as stated in some dictionaries; it is, I believe, a compound of brass and tin.

In this last word the Panjabi is the only language which retains the palatal final vowel, probably softened from the य of the Skr. This ख has in Sindhi undergone a regular process which is not found in other examples. The य hardens into ज, and the स passes into ह, as usual in Sindhi, and the two letters then coalesce into झ. It has been suggested that the termination of the genitive case in Marathi, चा, ची, चे, etc., is derived from ख, the termination of the Skr. genitive of nouns ending in -a; this is not improbable, and will be discussed in its proper place when treating of the case-endings of nouns.

अ, झ.—In the word अमृ “beard,” which has been already quoted, the final र has altogether disappeared, and the श hardened into ङ, while the vowel has leapt over into the preceding syllable, thus resulting in मूङ्ग and the like. In the majority of instances the र disappears and the श is changed to स, as in the following words :

Skr. आवण “July-August,” H. सावन, P. साउण, S. सावणु, G. सावन, M., O., B. Tatsama.

Skr. श्रवण “hearing,” Pr. सुणण, H. सुना, P. सुणना, S. सुणणु, B. सुनन, O. शुणिना.

Both elements are sometimes preserved by splitting, as—

Skr. आश्रय “refuge,” H. आसरा, and so in all.

Skr. मिश्र Brahman's title, H. मिसर, P. मिस्तर, S. मिसिर, G. मिसर, in the rest as a Tatsama.

In a few words the rejection of र is compensated by anus-wāra. Thus :

Skr. अश्रु “tear,” Pr. अंसू, H. आंसू, P. अंसु, G. आञ्जु, S. हंज, M. आंसू, where the palatal sibilant has changed into the media of its organ in P., G., and S.

It is unnecessary to give examples of झ, as they follow the same rule.

झ is a rare nexus; the commonest instance is झाघा "praise," H., P. सराहना, where, as usual with झ, it is treated by splitting.

ञ, ख.—In both these combinations the व generally disappears, but its influence often suffices to change the following vowel into उ or ओ. Examples:

ञ.

Skr. ञ्जशुर "father-in-law," H., B., O. समुर, P. सज्जरा, सीहरा, S. सज्जरो, M. सासरा, G. *id.*

Skr. ञ्जयू "mother-in-law," H. सास, P. ससू, S. ससु, G. सांसू, M. सासू, सासूस, B. शास, O. शाश.

Skr. ईश्वर "God," H. ईसर, P. *id.*; more generally used as a Tatsama.

ख.

Skr. स्वामी "Lord," H. साई (see Chap. III. § 65).

Skr. स्वपन "sleeping," H. सोना (see Chap. III. § 52).

Skr. स्वक "own," "akin," H. सगा, P. सग्गा, S. सगो, M. सगा, G. सगुं.

Skr. स्वांग "mimicry," H. सांग, P. *id.*, S. सांगु, M., G. सोंग.

§ 92. ह is found only in the weak nexus, because if it enters into the mixed nexus it merely aspirates the strong letter, and does not retain any separate existence.

In Sanskrit the ह precedes the nasal in some instances; in this case it is in Prakrit and the moderns placed after the nasal. Prakrit instances are वण्ही, जण्ह, for वहि, जहु. The principal modern example is—

Skr. चिह्न "mark," Pr. चिन्धो, H. चिन्हा, P. चिहन, S. चिहनु, M. चिन्ह, G., B., O. *id.*

In all these languages the inversion takes place, except in P. and S., where the nexus is split. The Prakrit form is peculiar, and does not occur in modern times.

When combined with the semivowels य or व, the latter take their respective consonantal forms ज and व, and a mixed nexus thus arises in which the ह merely aspirates the strong letter. Thus :

Skr. गुह्य "secret," Pr. गुञ्झो, M. गूज, S. गुझो, G. गुज, P. गुञ्जा.

Skr. बाह्यक "outer," Pr. वञ्ज्यो, S. बाझूं "without," P. बाझ, बाझों, *id.*

Skr. जिह्वा "tongue," Pr. जीहा, H. जीभ, and so in all.

Skr. विह्वल "agitated," Pr. वेब्भलो, H. बिहबल, P. बिज्जल.

ह् and ल्ह are generally preserved, as they occur only in a few Tatsamas, as the proper name प्रह्लाद, now written पहलाद.

§ 93. To close this portion of the work, it remains only to offer some observations as to the relative strength, as tested by their tenacity in resisting absorption, of the weak letters.

First of all come the nasals, which are very seldom, if ever, assimilated, and may be classed in order of strength thus: म, ण, न. The other two nasals, ङ and ञ, are always treated as anuswâra, and do not occur in the weak nexus.

The question between the semivowels and sibilants is more difficult to decide. On the one hand the latter frequently vanish into ह, while on the other, when preceding य or व, they absorb those letters, as they do also र in such words as शीर्ष = सीस, and others. The total disappearance of a sibilant from a weak nexus is rare and exceptional, they seldom get further than the change to ह, so that perhaps upon the whole it may be said that the sibilants are more tenacious than the semivowels, inasmuch as they never, like the latter, entirely disappear. With the sibilants may be classed ह, which is their product and representative from early times, and then follow the semivowels in the order given above.

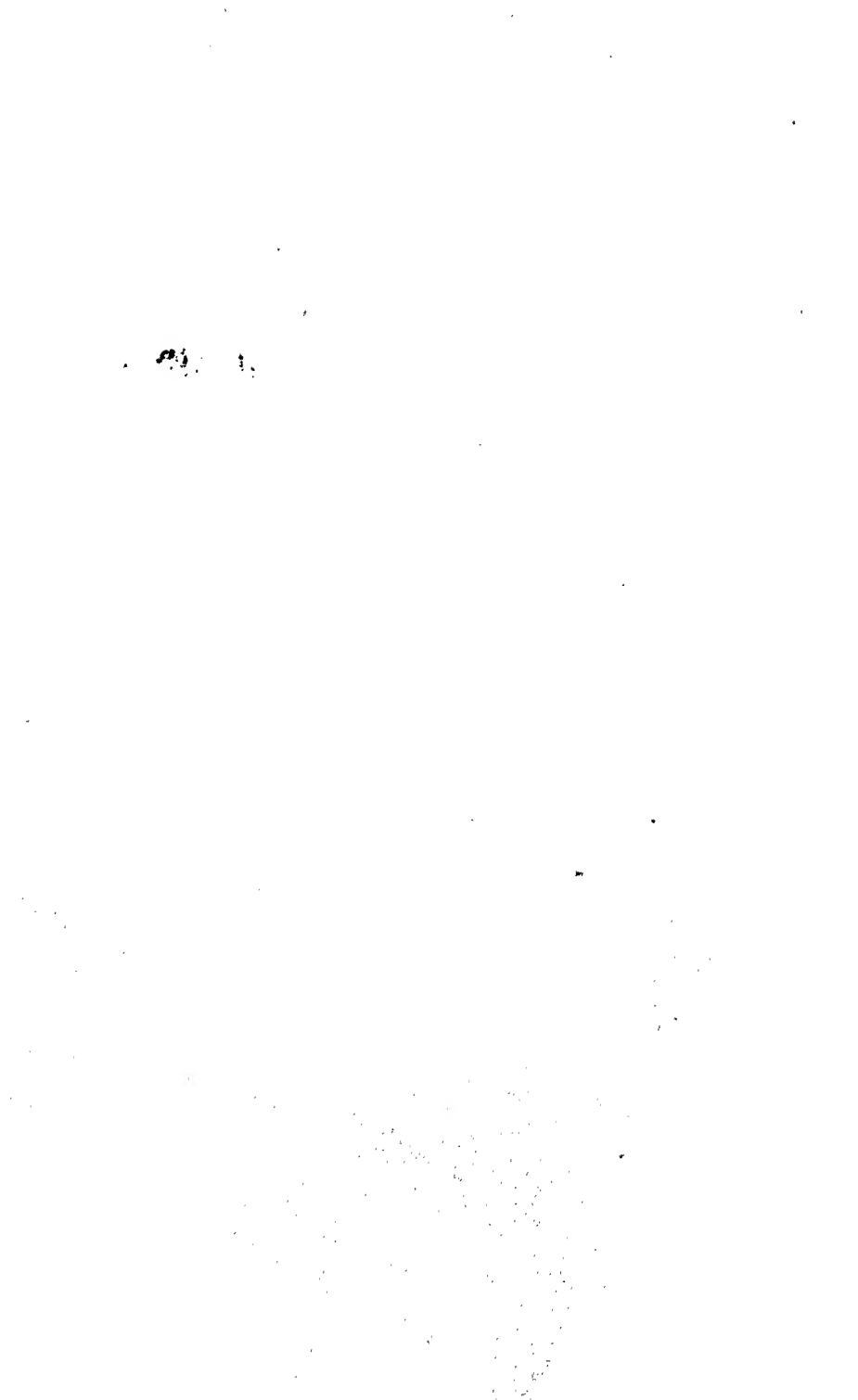
Thus the whole of the weak letters, as arranged in order of strength, would stand as follows :

First, the nasals { म.
 ए.
 न.

Second, the sibilants श, ष, स, and ह
(these are equal among themselves).

Third, the semivowels { व, when equivalent to व.
 य, " ज.
 ल.
 र.
 व, when softened to उ.
 य, " इ.

As regards the modern languages, there is little or no difference between them in this respect. In all of them early Tadbhavas are prone to absorption, late Tadbhavas to retentive of both letters by splitting. Thus, we have on the one hand काम, कान, on the other करम and करन. Words of the latter type are frequent in literature from its earliest period, but it must be remembered that the earliest works in modern literature are contemporaneous with the rise of the modern Tadbhav period, and that the older words which exhibit the Prakrit system of absorption were in all probability, if not certainly in use in the mouths of the people all the while.



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